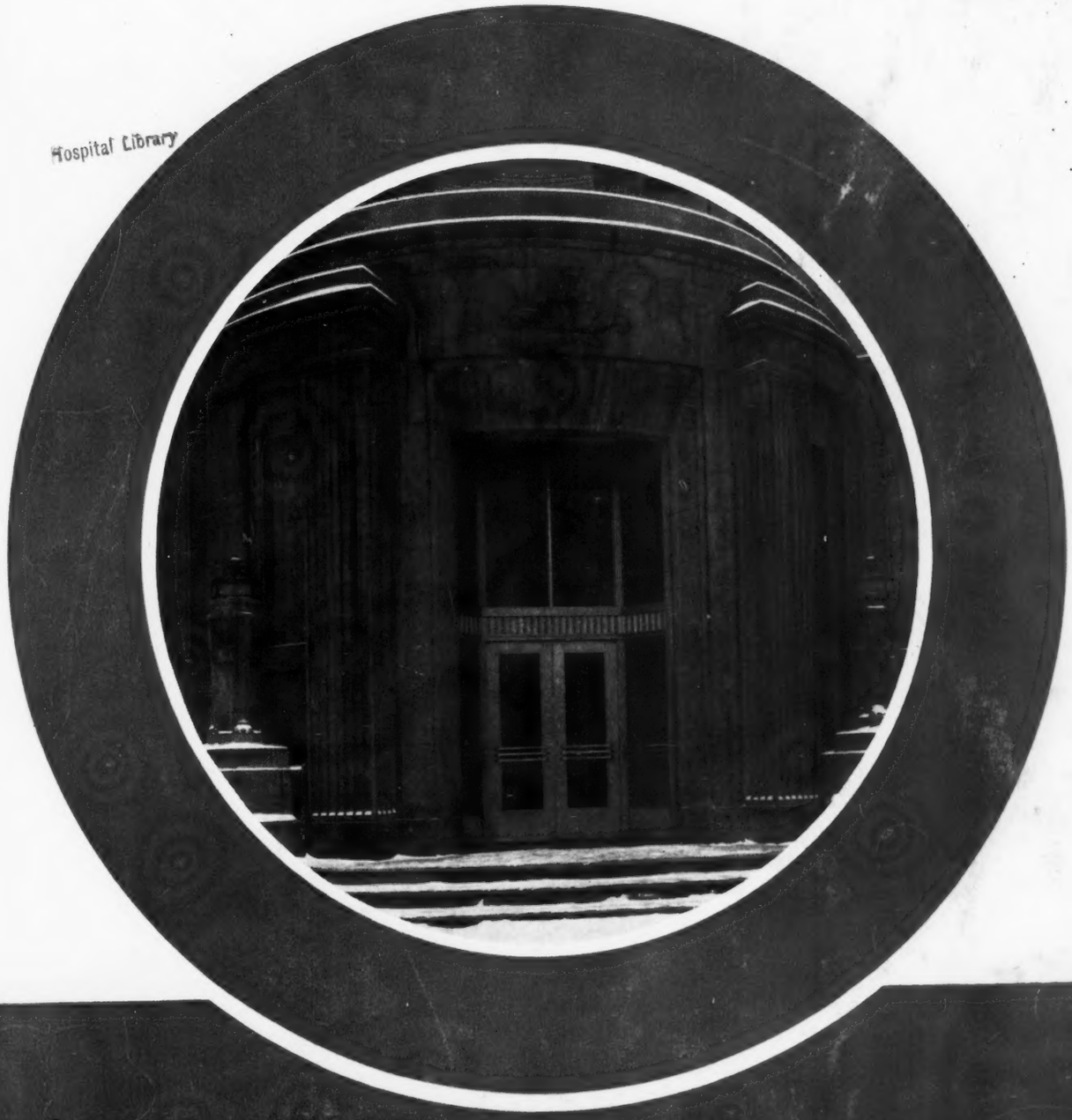

the MODERN HOSPITAL

VOLUME 52 JUNE 1939 NUMBER 6

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For June 1939

Just in Passing—

THIS month it is refrigeration that has the stage. Next month air conditioning will receive special attention. Several of the leading authorities in the country have prepared for our July portfolio careful statements regarding the place of air conditioning in the hospital. You will even find the experts disagreeing a little. However, that is only natural on such a new and challenging subject.

THE editor has been thinking seriously on the subject of intern education, a procedure that each of us could well emulate at this time of year. Next month he will unburden himself. Since the new crop of interns will just be arriving you will probably be more than ordinarily interested in what he says. And while we are on the subject of intern education, take a look at the short article by Carl P. Wright in this month's issue. He has something there.

WHAT about this much discussed problem of governmental general hospitals encroaching on the field of the voluntary institutions? What organization do these institutions have from the administrative point of view? Do they accept private patients? If so, how many? These and many other questions on governmental hospitals will be argued and answered in a series of three articles starting in the July issue. The information they contain is important in deciding local as well as national policies.

ONE of the continent's leading hospitals, Toronto Western, is engaged in a large fund-raising effort. The administrator has effectively discussed the relations that this work bears to the whole problem of hospital public relations. Next month he will outline the type of effort that should precede and follow an attempt to raise

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funds for a hospital. All readers who now have no financial problems and do not expect to have them in the future may skip this article.

WHO ever heard of a job analysis for a hospital itself? What, no hands? Well, the president of the American Hospital Association has prepared such an analysis and it, too, will appear next month. We believe Doctor Agnew is right in implying that the first step in establishing sound public relations is to make a hospital job analysis.

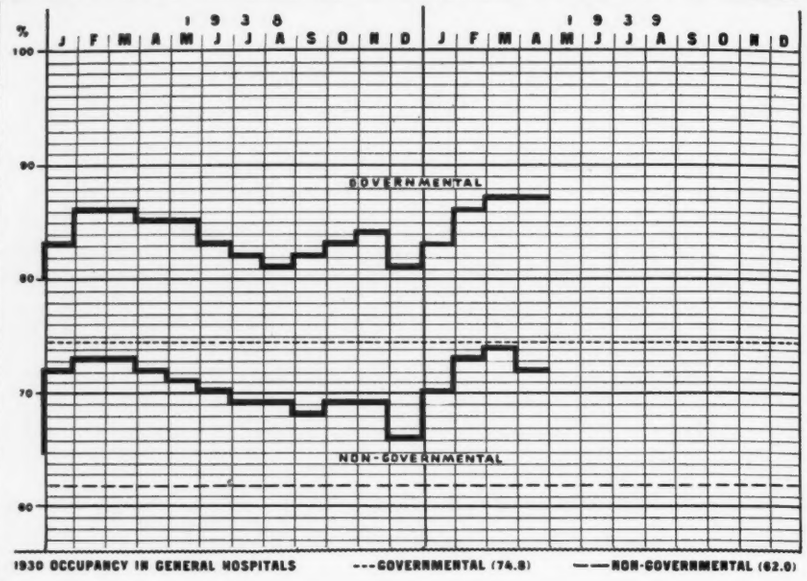
THE position of hospital housekeeper becomes each year more important. Many housekeepers now not only direct large numbers of employes but also act as interior decorators and consultants to the purchasing agents. Where can hospitals obtain women with the proper training to handle such important matters? Mrs. Alta M. LaBelle of Michael Reese Hospital, Chicago, says that scarcely a week goes by that she does not have an inquiry for a young, well-trained housekeeper. Usually she has no one to send with sufficient background. So she has outlined a course of training for this group. If it were put into effect, the dearth might be partly filled.

EITHER protecting or endangering the health of patients and personnel, miles and miles of piping traverse the modern hospital plant. There is in work a special portfolio on this subject.

HOSPITAL OCCUPANCY BAROMETER

Type and Place	Census Data on Reporting Hospitals: Hosp.[1]	Beds[2]	1939: April	1939: Mar.	1938: April	1938: Mar.
Government						
New York City	17	11,027	108*	108*	102	104
New Jersey	4	2,122	92*	92*	89	90
Washington, D. C.	1	1,220	70*	70*	70	75
N. and S. Carolina	13	1,740	69	68	69	69
New Orleans	2	2,466	97*	96*	99	98
San Francisco	3	2,255	93	94	92	89
St. Paul	1	850	76	82	73	75
Chicago	2	3,619	90	88	86	87
Total[4]	43	25,299	87*	87*	85	86
Nongovernment						
New York City[3]	68	15,194	77*	77*	77	77
New Jersey	62	9,772	75*	75*	71	72
Washington, D. C.	9	1,818	71*	71*	71	74
N. and S. Carolina	111	7,314	68	71	66	68
New Orleans	7	1,176	69*	73*	73*	73*
San Francisco	16	3,178	74	77	71	75
St. Paul	9	1,079	70	76	74	75
Chicago	14	2,568	67	68	64	66
Cleveland	6	1,217	80	81	77	79
Total[4]	302	43,316	72*	74*	72*	73*

[1]Excluding hospitals for tuberculous and mental patients and institutional hospitals. Census data are for most recent month. [2]Including bassinets, usually. [3]General hospitals only. [4]Occupancy totals are unweighted averages. *Preliminary report. Complete occupancy figures for January, 1933, to October, 1938, are given on page 798 of The Seventeenth Hospital Yearbook.



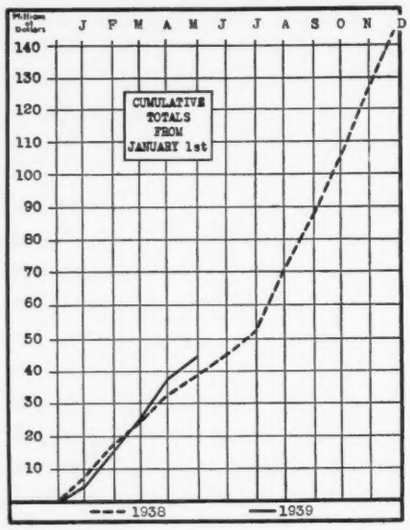
Occupancy Begins Seasonal Decline; Construction Continues Strong

Occupancy in nongovernmental general hospitals started its usual seasonal drop in April, receding two points from the high point of 74 attained in March. The March figure equalled the highest point that the occupancy of these hospitals has reached since the depression. Similar high levels were attained in March and April 1937. These three months have the highest occupancy of any months since the present series of records was begun in January 1933.

In governmental hospitals the occupancy figure remained at 87, a figure that is somewhat higher than the occupancy recorded for last year and the year before but still well below the overcrowded conditions encountered in the early months of 1936, 1935 or 1934. Occupancy in the governmental hospital in St. Paul dropped sharply as it did also in the voluntary hospitals in that city. In other cities the occupancy of governmental hospitals rose slightly while that in nongovernmental decreased in each of the reporting cities.

A total of 49 new hospital building projects were reported during the period from April 10 to May 22. Of these 42 reported the costs of construction, which aggregated $6,906,000. This brought the total of hospital construction for the year to date to $44,264,000, as compared with $38,664,000 for the comparable period of last year.

HOSPITAL CONSTRUCTION



Of the new building projects in the recent period, 10 were new hospitals to cost $2,247,000. There were 38 additions of which 31 reported costs of $4,609,000 and there was one new nurses' home which was estimated to cost $50,000.

The general wholesale price index of the *New York Journal of Commerce* made several minor ups and downs in the four weeks ending May 13. No definite trend was discernible, although at the end of the period the index was down slightly. Grain prices advanced steadily from 57.6 on April 15 to 61.8 on May 13. During the same period the food price index went from 67.4 to 65.3, textiles from 55.4 to 56.7, fuel from 79.9 to 80.6 and building materials from 97.7 to 97.9. (All price indices are based on 1927-1929 figures as 100 per cent.)

The price index for drugs and fine chemicals computed by the *Oil, Paint and Drug Reporter* advanced slightly after April 17 and then receded again.

The cost of living of industrial wage-earners, as computed by the National Industrial Conference Board, rose slightly from March to April, the increases in food prices and rents more than offsetting the seasonal decline in coal. Living costs in April were 2.1 per cent lower than in April 1938 and 14.1 per cent lower than in April 1929 but were 18.5 per cent higher than at the low point of 1933. The board also estimated that unemployment declined in March by 2.6 per cent as compared with February. Employment rose from 43,656,000 workers in February to 43,991,000 in March, a return to about the level of September 1938.

Special TRIAL OFFER!

7-PIECE ROOM SERVICE SET OF "Wear-Ever" CLINICAL WARE AT *Reduced Price*

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If you haven't tried "Wear-Ever" Clinical Ware, here's a chance to give it a thorough and conclusive test with a small investment. Not a test of just a few odd pieces, but a practical, significant study of one complete service for a private room; enough pieces to show you how "Wear-Ever" Aluminum actually compares, in convenience, cleaning and durability, with the equipment you now have.

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WITH THE ROVING REPORTER • • • •

Bonus Vacation Pays

• A bonus vacation to employes offered during the fifth, tenth and fifteenth year of consecutive service will contribute greatly to the hospital morale. That's the way it has worked out in the Children's Memorial Hospital, Chicago. We have Mabel Binner's word for it.

An extra week is given to all professional and clerical employes during the fifth year of service. During the sixth, seventh, eighth and ninth, the employe receives the same time granted him prior to the fifth year. During the tenth year, however, he receives two weeks' additional time, and during the fifteenth year, three weeks' time. Those employed in the household and mechanical departments receive a bonus vacation of one week during the tenth year and of two weeks during the fifteenth year.

During 1938 Miss Binner reports that 49 people were affected, most departments carrying the work without additional personnel. Total cost for bonus vacation replacements was about $400, an average of $8 per employe.

Instead of Flowers

• Being a hospital patient has its compensations these days. Your Roving Reporter was reminded of this when he was handed an attractive little gift card that is being distributed at the Massachusetts Memorial Hospitals in Boston to those who would brighten the hospital stay of relatives and friends. Instead of the customary flowers, books or fruit, it brings the good news that the recipient is the guest of the donor for one or more days of his hospital stay.

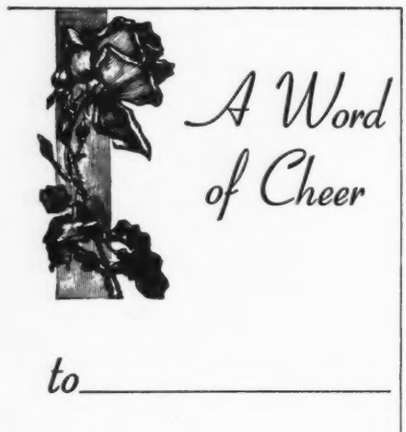
"Rather than sending flowers as a reminder that you are in my thoughts, and thus perhaps adding in a small measure to your happiness"—we are quoting from the message which is personally signed—"I have decided to have the happiness myself which will come from knowing you are my guest for —— days during your stay in the Massachusetts Memorial Hospitals.

"This is to let you know I have made these arrangements with the hospital and that they will be confirmed when you are presented with the usual bill."

The cover is decorated with a rosebud which Dr. H. M. Pollock, the superintendent, tells us may be hand colored by the volunteer service. "A Word of Cheer" is made all the more personal by the inclusion of a line bearing the name of the patient and the greeting, "With best wishes for a speedy restoration to health."

The suggestion to adopt this means of showing sympathy is embodied in an interesting little booklet telling the story of the Massachusetts Memorial Hospitals. It's called "Let's Glance Through," which, incidentally, is an inviting title.

"Just a thought about flowers. Patients frequently receive enough flowers during their stay at the hospital to have paid for many days' care. While flowers are always appreciated, it would often be of more real value to the patient to receive a card saying that instead of flowers, one or more days, or even a part of a day, had been paid for and that he was the guest of the signer for the period stated. These cards are available at the office of the cashier."



Think of the relief to the nursing staff of having fewer flowers to care for!

Reading's Guest Card

• It wasn't long after talking with Doctor Pollock about his "Word of Cheer" that we encountered another Guest Card. (No wonder hospitals are becoming more popular.) This card is being distributed at the Reading Hospital, Reading, Pa., where it has received much acclaim. It is more informal, reading "Dear ————: This card indicates that you are my guest in the Reading Hospital, for the day. I wish for you a speedy recovery. Sincerely, ————." The idea is explained on another card that reads as follows:

"A practical gift, bringing happiness and good cheer to your friend in the hospital, is the use of our Guest Card.

"If you pay for one or more days' hospital care, the hospital will be pleased to send a Guest Card to your friend indicating that he is your guest in the hospital for whatever length of time you have provided.

"It may be the means of aiding the patient on the way to recovery by relieving part of his obligation to the hospital.

"It is a genuine expression of sympathy and friendship.

"Ask for the Guest Card at the office in the foyer."

This Letter Produced

• We have the assurance of F. P. G. Lattner, superintendent of the Finley Hospital, Dubuque, Iowa, that the following collection letter has produced good results. In fact, he is willing to attest that it brought more than 40 per cent response:

"Dear ————:

"We have been going over our older accounts to decide what to do about them. Statements and letters have been sent, but still a balance remains. It was suggested that we turn the accounts over to a collection agency to handle.

"However, we recognize that in many cases a hospital bill is a burden. Therefore, we are first going to write you.

"We want you to write us advising us as to your present financial condition. We want you to tell us how much you can pay and when. With this information our board can decide whether to accept your proposition or to turn the account over to a collector. We would rather have you pay us direct, however.

"We feel this is a fair offer and we do expect the courtesy of an answer. An answer may prevent embarrassment to you.

"For your information, our records show the balance due at this time is $————.

"Very truly yours,"

LOOKING FORWARD

Brighter Day for Mental Hospitals

PRELIMINARY data from the survey of the nation's facilities for the care of nervous and mental patients, presented by Dr. Samuel W. Hamilton at the recent meeting of the American Psychiatric Association, aroused widespread interest.

Doctor Hamilton and his associates find much that is still unsatisfactory in the picture. The demand for hospitalization is increasing faster than the population and many state hospitals are badly overcrowded. Some mental hospitals are growing to such huge size that they become mere barracks wherein it is difficult even to attempt personalized treatment. The ratios of physicians and other employes to patients still fall far below acceptable standards. Nursing education in mental hospitals presents a serious problem and apparently the increase in affiliating nurses is not keeping pace with the reduction of full-time student nurses. The depression has severely affected budgets and made recent years a trying period for administrators.

Viewing only these facts one could be glum indeed. But they are only half of the picture. The other half deals with changes and trends. Here the situation is almost entirely hopeful. Extensive building programs have been undertaken in many states to meet present demands. The ratios of physicians and employes to patients improved appreciably from 1923 to 1936, the years covered by the survey. There is an awakening of interest on the part of many physicians in these hospitals to the need for better education, more intelligent research and improved care of patients. This has been stimulated in considerable part by the desire of these men to pass the examinations of the American Board of Psychology and Neurology.

The number of graduate nurses employed, while still low, has risen generally and in a few states already equals or exceeds the standard of one nurse to eight patients. A better quality of attendant has been available to mental hospitals because of lack of employment in other fields.

Occupational, physical and the other special therapies are being more widely used and there is a receptive attitude to the new drug therapies. Psychotherapy has become better organized and, under the stimulus of the American Medical Association, work in pathology has taken a decided spurt. While the demand for treatment of ambulatory patients still exceeds the supply, an increasing amount of this work is being done, especially for children. A few institutions, including those connected with medical schools, are equipped and able to give patients intensive, personalized treatment. Other hospitals are seeking medical school affiliation.

While much remains to be done, it is apparent that mental hospitals are moving steadily toward the goal set for them by Dr. Clarence M. Hincks, that is, to be hospitals in fact as well as in name.

Running for the Storm Cellar

THE recent reduction in payments to hospitals made by the New York and Boston hospital care insurance plans has had several salutary effects. In the first place, it has demonstrated to the public that hospital care insurance plans are effectively backed by the hospitals. Perhaps this may explain why the enrollment of members in these two plans has recently gone forward more rapidly than before.

A second important benefit is that all plans throughout the country have suddenly realized, if they had not before, that "it can happen here." So much prosperity had attended the well-run plans that there was a tendency upon the part of some people to think that the supply of funds was inexhaustible.

The third principal gain is a clearer realization than ever before that enrollment procedures are vital to safety. Apparently a sound manner of enrollment is the most important safeguard that plans can have. Group enrollment spells safety; individual enrollment spells danger. Certainly there appears to be little justification for giving maternity benefits to subscribers who are individually enrolled. When this is permitted such groups become, in practical effect, mere maternity clubs. Other factors, such as the influenza epidemic and occasional chiseling by physicians and hospitals, have contributed to the high utilization ratio in New York and

Boston, but on a quantitative basis they are relatively insignificant beside the matter of enrollment.

While these important benefits are to be gained from analysis and study of the recent experiences, certain dangers must be considered. Commercial insurance agencies have tried, although apparently without marked success, to turn the experience to their own gain. A few hospital administrators and trustees, realizing keenly that their institutions must ultimately hold the bag, are running for the storm cellars. They are attempting to bring pressure on plans to cut down on benefits, to toss overboard all experimental enrollment procedures and to withhold any attempts to take in new territory.

Too much conservatism is just as dangerous as too much radicalism. The situation calls for balanced judgment. Experiments in enrollment procedures, in ward service plans, in extensions to rural areas and in other socially significant moves should be continued. But they should be undertaken purely on an experimental scale and should not be extended until there has been sufficient closely analyzed experience to serve as a safe guide. It is well to make progress slowly but it is important to make some progress each year.

Imports From Germany

THE adjusted tariff against German goods became effective on April 22. This affects the hospital field chiefly in relation to steel surgical instruments, such as hemostats, scissors and tissue forceps. Brass goods and brass cutting instruments are now extensively manufactured in this country.

The increase of duty is from 55 to 80 per cent. Obviously this advance will serve as an incentive to American manufacturers to increase production on the items affected. The principal problem they will face is the old one of finding trained workmen. It is reported that no increase in prices is contemplated for the near future because most of the dealers have stocks on hand purchased at the old level. As these stocks are exhausted, however, the price on German-made instruments will obviously have to be advanced.

Education for the Sisters

FOR some years the Catholic sisterhoods have been manifesting a growing interest in progressive, systematic education for hospital administration. This interest was formally expressed in a resolution adopted at the Chicago meeting of the Catholic Hospital Association. It has been given more concrete manifestation in the large attendance of Sisters at hospital institutes.

Even more significant, perhaps, is the fact that Sister M. Adele Meiser of St. Francis Hospital, Pittsburgh, has been a student at the graduate course in hospital administration at the University of Chicago during the past year and this month is beginning her administrative internship at Evanston Hospital, Evanston, Ill.

The administrative internship is considered by officers of the American College of Hospital Administration and by others concerned with this field of professional education to be an immensely important period. During this time, the student learns the practical application of the theoretical material studied during the graduate course. A good internship is essential if the student is to develop that balanced and well-rounded judgment that is the hallmark of the competent administrator.

While Sister Adele is the first of her group to have taken the Chicago course and the first, therefore, to have embarked upon a formal administrative internship under university sponsorship, this procedure is not a new one to the Catholic sisterhoods. There have been parallel developments in other fields, such as public health nursing, in which Catholic Sisters leave their communities in order to obtain the training they wish at the university level.

The facts in this case reflect credit upon Sister Adele, upon her Mother Superior, upon the University of Chicago course and upon Evanston Hospital. A happy incident of the arrangement is that Sister Adele is planning to prepare her master's thesis on the inclusive rate system of charges, a plan in which Evanston Hospital has furnished national leadership.

The trail having now been blazed, it may be confidently expected that other Sisters may follow it.

National Health Act

IN THE next few months, hospitals of the United States will make an important decision affecting their public relations. This decision concerns their public stand upon the National Health Program in general and upon Senator Wagner's proposed National Health Act in particular.

It is vital that hospitals make their position so clear that there will be no opening for misunderstanding or misrepresentation. It would be exceedingly unfortunate if large groups of consumers of hospital and medical service should be led to believe that hospitals were opposing improvements in our present methods of providing and paying for medical and hospital service. Such is not the case. Hospitals, both voluntary and governmental, are public institutions designed to care for the self-supporting and the indigent without discrimination. Nearly all hospital administrators and trustees are eager to make the service of their institutions available to all the people on the most favorable terms possible.

The National Health Act is disappointing in several respects, particularly in its omission of all mention of governmental responsibility for the care of the indigent sick and its vagueness regarding the provisions for a

general medical program. This vagueness has been defended upon the ground that the federal government rightly wants to leave wide latitude to the states. Even so, federal legislation on this subject could be more concrete and tangible without encroaching unduly on the rights of the states. It is not wise statesmanship to ask either hospitals or the general public to pass judgment on a pig in a poke.

In spite of these objections, however, there is much that is good in the National Health Act. Practically all professional associations have approved of the proposed extensions of public health work. The hospital associations have gone on record as favoring federal and state aid in the building of local general hospitals where these are needed. Additional mental and tuberculosis institutions are also needed in certain areas and federal aid will greatly speed up their construction.

On the important question of compulsory health insurance or state medicine, hospitals, in general, might well take a cue from a remark recently made by the director of the Commission on Hospital Service. Asked in a radio interview whether he was in favor of compulsory or voluntary insurance, he said that he was not fighting compulsory health insurance but was doing everything in his power to make it unnecessary. That is a good slogan for us all.

Evening Education

THE American College of Hospital Administrators is interested in the advancement of the educational qualifications of those now engaged in hospital administration as well as of those who will come into the field in the future. It has demonstrated this interest by the vigorous leadership given to the movement for hospital institutes. Progress to date in this field is indicated in a summary that was recently prepared by the executive secretary.

Now the college goes a step farther and announces, in an article by the president appearing in this issue, a new evening course in hospital administration to be given at the University of Chicago. This is an important move. Undoubtedly, if this course proves successful, other universities in appropriate places can be stimulated to follow the Chicago example.

Explosions Threaten

HOSPITAL executives have long been convinced of the necessity of safeguarding their patients and employes against the hazards of injury by explosion. No one doubts the fact that an optimum mixture of oxygen with ether, nitrous oxide, ethylene or chloroform in the presence of a spark is capable of producing a disastrous combustion or explosion.

Knowing all this, some administrators still refuse to believe that such a thing could happen to them. It is true that safety refinements in the construction of gas machines have eliminated the traditional rubber bag enclosed in silk mesh. However, fractures are still treated in the x-ray room while the patient is unconscious from ether, even though this practice may result in a catastrophe. Nose and throat surgeons still use cautery about the head with the patient exhaling a potentially explosive gaseous mixture with every breath. Ethylene and cyclopropane are still frequently administered in operating rooms unprotected by outside switches, sparkproof lighting fixtures, adequate humidity and other protective devices.

The fortunate rarity of operating room explosions has lulled too many administrators into a state of false security. As a result the press too often records the details of an ether fire or an explosive accident with ethylene, cyclopropane or nitrous oxide.

Many years ago a distinguished member of the American Hospital Association laid down a sensible and efficient program by which an operating room might be rendered relatively explosionproof. More recently an able hospital engineer summarized existing knowledge on this subject for publication in this magazine in its April and May issues of 1936. The files of hospital and medical literature are replete with advice as to how to avoid such dangers. Such information may be had for the asking. But administrators, yielding to the pressure of anesthetists, surgeons and salesmen, have allowed themselves to purchase the newer gases and to employ the older ones without first protecting patients.

Administrators are challenged to reconcile their traditional conception of responsibility for the welfare of the sick with their too frequent ignoring of the ever present danger of operating room explosions.

Price of Ergot

HOSPITALS are no doubt aware that the price of ergot and its various preparations is peculiarly sensitive to political unrest abroad. On January 1 the price of ergot in most localities advanced about 33 per cent. The reasons given for this marked rise are that royalties on certain trade preparations must be rather widely distributed and that unrest in countries in which ergot is largely produced causes a scarcity. These reasons no doubt are bona fide and yet it is difficult for the hospital to meet this marked increase in the price of a drug that is required in such large quantities for the treatment of patients. In the past there have been attempts to corner the ergot market and to increase its price to the patient. Such manipulations seem hardly ethical and the hospital field cannot avoid frowning upon them. All that the hospital demands is fair play. If events beyond the control of the manufacturer skyrocket the price of this product, then of course the hospitals must accept the situation as unavoidable.

Damage on Display

EVERYONE responsible for the financing of the hospital has had occasion to deplore the needless expenditure brought about by waste, damage or destruction of one kind or another. One must allow for wear and tear and for depreciation, but the elementary principles of discipline and the protection of the hospital budget require that reasonable precautions be taken to keep unnecessary destruction down to an absolute minimum. Carelessness on the part of one employe of which other employes may not be aware is the greatest single factor that must be taken into consideration.

Every institution has its own kind of economy program that is enforced according to the individual circumstances. The effectiveness of the program depends upon the interest and the cooperation of the working staff. True economy does not imply the lessening of the consumption of materials below the requirements of the patients. One would not think of depriving patients or employes of necessary comforts. However, there is a disposition to regard hospital property as public rather than private.

Every hospital executive knows how difficult it is to impress upon employes the need for careful handling of equipment and materials. Every individual feels that he is less careless than his neighbor and it is, therefore, necessary from time to time to show him the extent of collective carelessness and the possibilities of his own contribution toward the solution of the budgetary problems of the hospital.

For budgetary as well as for educational reasons, we decided to organize an exhibit of spoiled and broken material. Even though particular individuals are only occasionally responsible for breakage, these items grow in volume over a period of time. The exhibit was set up in the social hall and equipment and materials of every description were put on display with an appropriate legend telling the story of each item damaged.

LIBRARY BOOKS TORN & DAMAGED

Although this exhibit was planned originally as an object lesson for the members of the nursing department, employes of other departments, when they became aware of this activity, joined in the movement and contributed to the exhibit, making it an impressive illustration of the totals to which individual cases of spoilage could grow. Lessons in the proper handling of each type of equipment were given while reasons for breakage were stated. Space does not permit a detailed description of each article in the exhibit; only a few can be described here but they may be taken as typical of the remainder.

Ruined bed linen and wearing apparel were tacked on racks with an accompanying card bearing the following legend:

Each piece here exhibited is a bed jacket, gown, bathrobe or pajama that was torn by workers for the purpose of obtaining dust rags and wash cloths.

There is always a sufficient amount of material on hand in the linen room that may be obtained for such purposes on requisition. Pillow cases that from all appearances had been used for floor cloths and hand towels in a condition that indicated that they had been used as dust cloths on the wards or for cleaning pots or machines in the kitchen were exhibited. A linen delivery truck was filled with torn linen representing the amount that had accumulated over a period of one week.

Articles, such as air cushions, ice caps, hot water bags, dressings, small pillows, adhesive plaster and instruments, were arranged separately on tables. These had been delivered to the hospital laundry as a result of the careless stripping of beds, dressing carriages and treatment tables. A placard called attention to each of these and to the danger of causing injury to the workers in the laundry, aside from the damage to laundry equipment.

TORN LINEN ACCUMULATED OVER A PERIOD OF ONE WEEK

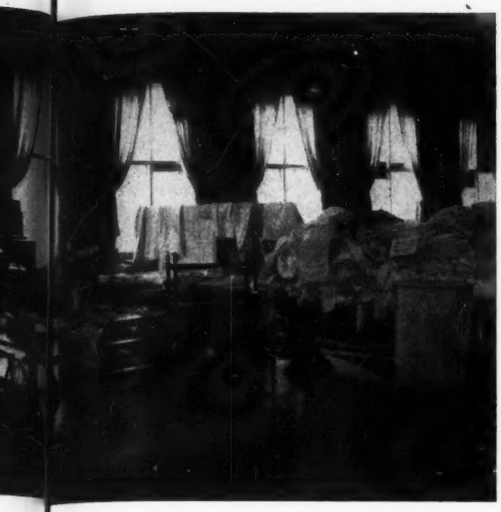
Air mattresses were on display accompanied by descriptive legends. White chalk was used to mark off the damaged areas, which consisted of punctures made by pins or of damage resulting from the placing of the mattress directly on top of the spring. Attention was called to the danger of blow-outs resulting from overinflation and to the damage to the rubber resulting from improper storage of the mattress.

A pile of broken glassware, such as intravenous and manometric tubes, intravenous and hypodermoclysis flasks, insulin and other syringes of various sizes and expensive glass equipment in daily use on the wards, was arranged to attract the eye. The card that accompanied this group taught a lesson in careful handling, proper technic in sterilization and the danger of having such equipment within the reach of irrational patients.

Comparatively new bed blankets

Reduces Waste

A. C. DONAHUE, R.N.
Superintendent of Nurses
Montefiore Hospital, New York



THESE IODINE STAINS CANNOT BE REMOVED

were shown that had been ruined during the course of the treatment of dermatologic patients. The accompanying legend read:

An adequate amount of special linen and blankets may be obtained from the linen room for use in the care of patients afflicted with skin ailments.

A number of bedpans, dented and cracked, represented items of equipment that had been damaged by violent contact with hard surfaces, such as being dropped on tile floors or improperly placed in the bedpan washer. A burned container, together with rubber treatment tubes, syringes and needles, gave evidence of the fact that too frequently articles that are put on to boil are forgotten and allowed to boil dry and burn, rendering them unfit for further use. Pillows badly stained with iodine, mercurochrome, gentian violet and other dyes showed what happens when pillows are not protected by rubber cases while treatments are being carried out.

Practically new emesis basins and aluminum soap dishes were ruined when they were used as receptacles for burning pastilles. There were a dresser and its scarf that had been burned when a careless employe placed a lighted pastille on it. Bedspreads and blankets damaged by cigaret burns were on display, each with its instructive placard pointing out in detail the cause of the damage.

A number of surgeons' gloves were exhibited. Some of them had been ruined by drying on hot radiators; others, by improper preparation for sterilization, while still others had their cuffs partly ripped off as the result of being forcibly pulled on the hands. There were air cushions, hot water bags and ice caps that were damaged by contact with excessive heat and oils.

Occupational therapy patients are permitted to fold gauze and to make combines on the wards. The waste resulting from improper folding was demonstrated with accompanying instructions to head nurses to teach the proper procedure to the patients. The legend accompanying a pile of papers cut from hospital forms and used as scratch paper called attention to this wasteful practice and to the fact that an adequate supply of scratch pads is available on requisition.

Several wheel chairs were exhibited. These had been damaged when they were left out on the open porches and bridges during bad weather.

Medicine and blood chemistry bottles that contained ink and hand lotions were on display with the notation that putting them to such uses probably accounted for the disappearance of these containers from the hospital wards. Torn and weather-beaten window shades; carpets and rugs badly stained with ink and shoe dressings; desk, dresser and table tops ruined by substances containing a high percentage of alcohol, and vacuum cleaners and carpet sweepers damaged by misuse were collected from the dormitories and added to the exhibit.

Another placard instructed employes to use the bags made from the heavy blue paper wrappings that are removed from bolts of gauze and rolls of cotton as receptacles for soiled dressings and other wastes.

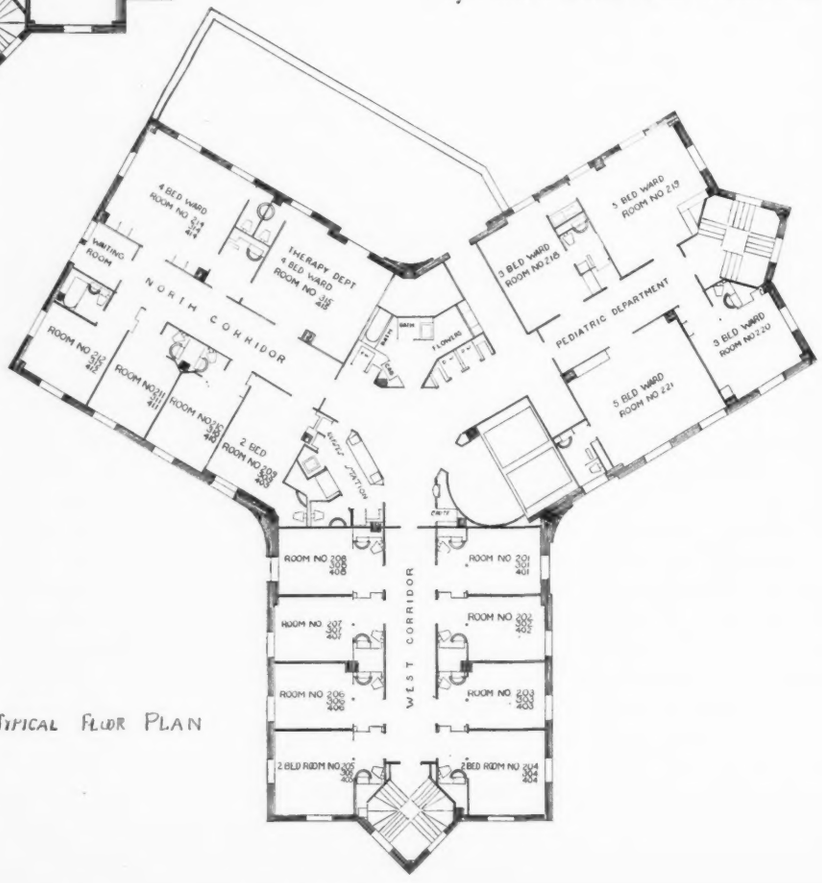
No estimate was made at the time of the exhibit as to the total cash value of these articles but there were literally hundreds of items. The unique quality of the exhibit made it so attractive that employes from all departments of the hospital came to view it, passing from table to table and showing great interest in the history of each damaged article as it was described in its accompanying legend. This was the purpose of the display and the effect on our personnel exceeded our expectations. We subsequently experienced a decided reduction in the number of articles damaged or ruined by improper handling and carelessness. Follow-up instructions on the wards then became part of the economy program.

Although the exhibit was held several months ago its benefits are still apparent in the continued low incidence of damaged property. We propose to repeat such an exhibit once a year as a reminder to old employes and as a stimulus to new ones. The sense of responsibility in the conservation of hospital equipment is strengthened by this procedure. Since the nursing department is numerically the largest in the hospital and since it devolves upon its members to handle some of the most costly and the most fragile equipment, the saving resulting from the improved attitude on the part of its employes toward the economy program is a most impressive one and has made the exhibit worth while.

Each Piece Represents a Sheet That Was Torn by Workers for the Purpose of Obtaining Dust Cloths and Washrags. There Is Always Material in the Linen Room That Should Be Used for These Purposes.

Depression Ghost Becomes a

FIRST FLOOR PLAN



TYPICAL FLOOR PLAN

FOUR times in the history of the Community Hospital, Battle Creek, Mich., we had been forced to increase our capacity until the time arrived, at last, when the only solution seemed to be a new building. This need was augmented by traffic conditions that rendered our location unsuited to hospital purposes.

It was one thing, however, to decide to build a hospital but quite another to accomplish the undertaking. The project was begun in 1929, just in time to be caught by the depression. After the shell was completed, work on the building ceased and for many years it stood, casting a ghostly, depressing shadow over one of the beauty spots of the city. A P.W.A. loan in 1936 was the means by which activities were finally resumed and it was a happy occasion for the whole community when the building was opened to the public Sept. 12, 1938.

Thus the Community Hospital of Battle Creek became a factor in the life of the city. It is a dignified building of white brick situated on an elevation overlooking Irving Park. The vista from its windows is beautiful and should be health inspiring. In the fall it includes the golden richness of changing leaves. Winter brings a veritable fairyland of jeweled loveliness, with miniature figures skating on the lagoons adding to the illusion. Spring's view is of blossoming lilac shrubs, tulip beds, rock gardens and willow trees swaying in the breeze and casting their shadows over rippling waters.

The Community Hospital has 124 beds. One passes through large glass doors into a crescent shaped entrance. Yellow terrazzo forms the floor and half of the wall of this room. The remainder of the wall and the ceiling are painted a soft gray as are the walls and ceiling of the whole first floor. Mounting a short flight of broad stairs, one enters, again through glass doors, into the lobby. This is a cylindrical room from which three

Beautiful Building

ELIZABETH NICHOLS

corridors branch. The floor of this room is a mosaic design of cream, green and black terrazzo.

One corridor of this first floor is devoted mainly to offices. Here are located the information office and the general, secretarial, administrative and historian's offices. There are two waiting rooms with adjoining toilets and lavatories, one for visitors and one for doctors. The doctors' room is equipped with built-in steel lockers. On the other two corridors are the emergency room, nursing director's office, students' library, dining room, kitchen, dietitian's office, laboratories and classroom.

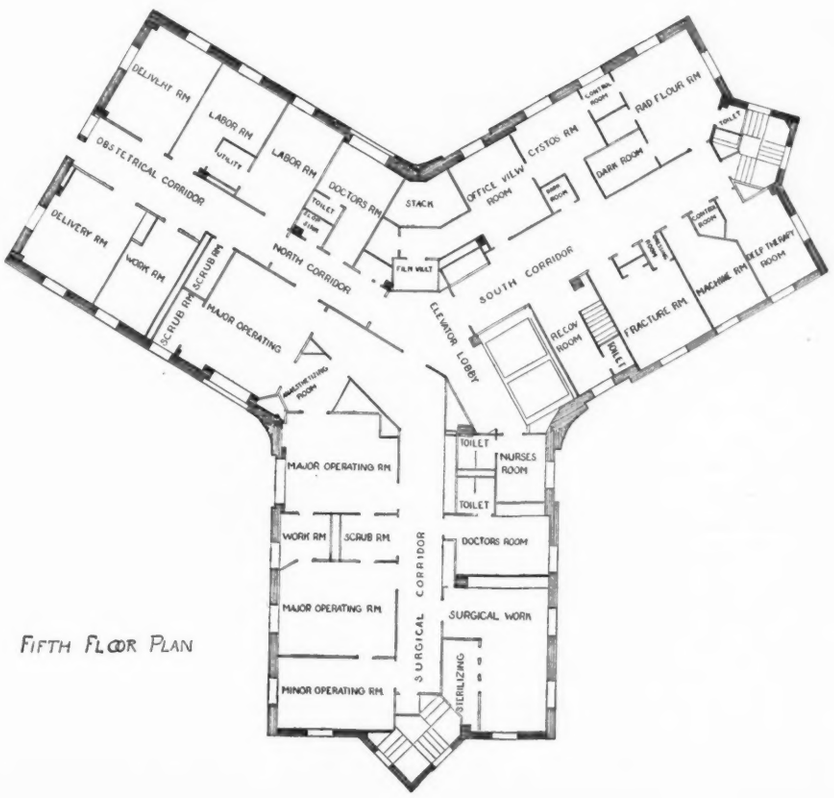
The switchboard is located on the first corridor near the information desk, in such a position that the operator can see the emergency entrance and can summon a nurse when one is needed, thereby eliminating the expense of a full-time nurse in the emergency room between the hours of 11 p.m. and 7 a.m.

On the second floor are the private rooms, semiprivate rooms and four bed wards for medical patients; the pediatric department, and a treatment room equipped with electrocardiograph machine, equipment for making metabolism tests and for giving diathermy treatments. The larger respirator is also on this floor.

The third floor is devoted to surgical patients and is similar to the second except for the children's department. On the fourth floor is the obstetrical department.

The equipment donated to the nursery by two interested women is, we feel, the coming equipment for all nurseries. Bassinets are of chrome and aluminum chosen because of the ease with which they can be cleaned and because each is a separate unit that can be maintained during the entire stay of the baby. The unit has

SECTS of THIRD & FOURTH FLOORS



FIFTH FLOOR PLAN

a table that folds along the side or extends like a tray table. In a compartment below the table are kept the utensils used in caring for the baby. There is also a tray that fits over the bassinet on which utensils can be placed while the baby is being cared for on the table. The bassinet is on a stand that is equipped with 3 inch casters, so that it may be easily wheeled to the mother at feeding time. The casters can be locked when the bassinet is stationary. We feel that this type of unit assures the baby as nearly complete protection from infection as possible. On this floor also is the infant's respirator.

Between the main corridor and the rooms on the patients' floors are small corridors, which contribute greatly toward an atmosphere of quiet for the patient. Each private and semiprivate room has its own lavatory and toilet with cabinet for wash basin and toilet articles; a few

The author is administrator of the Community Hospital, Battle Creek, Mich.

Right: Between calls the doctors at Community Hospital relax in this attractively furnished waiting room. Below: Visitors find the atmosphere of the main reception room more like a hotel than a hospital. The striking entrance appears on the front cover.

of the private rooms have baths adjoining. Between the wards are utility rooms with bedpan racks, lavatories and sterilizers, which eliminate the necessity for carrying bedpans through the halls. The utensils on these floors are of enamel.

One striking feature of the hospital is the color. The decorator has kept the happiness of the patient in mind in making her selections and, although every room is different, all are equally attractive. The rooms are decorated in pastel tints of blue, pink, cream, green and gray. Most of the windows are shaded by venetian blinds with draperies of chintz or flowered voile. Draperies, slip covers, tufted bed spreads and washable rugs were chosen to blend with the tinted walls.

In addition to the indirect ceiling light with closed top, there is a floor lamp in each room that may be used by doctors for dressings and for examinations. A reading lamp is attached to the head of each bed.

The furniture is of the modern type, in blond, green, walnut and light maple. The composition tops of the bedside tables blend with the color of the furniture. Private rooms have overbed tables with a concealed makeup box, the cover of which may also be used as a book rest. Small overbed tables with folding legs are used in the wards. Most of the dressers have finger holds under the drawers for convenience in opening and closing them, replacing the hardware that was so difficult to keep in order. Some of the better rooms have 39 inch beds instead of the conventional 36 inch type.

On each patient floor is one utility room in which there is a blanket warmer with sufficient heat to keep warm an emergency supply of glucose and saline solutions. Adjoining this room are a bathtub, a sitz bath, a shower and a small compartment for fixing flowers. The last named is equipped with sink, soil receptacles, shelves, vases and an ice cube box.

On each patient floor also there are a small unit with electric heater, sink and running water for the making of poultices, and a small room at the end of a corridor where relatives may wait in comfort. The waiting room is equipped with floor lamps, comfortable chairs, reading material and a smoking stand. Wheel chairs also have their nook, a small room by the elevator where they may stored to keep them out of the corridor.

On every floor of the hospital there is an ice-cooled drinking fountain.

On the three patient floors, medical, surgical and obstetrical, the floor covering consists of a rubber tile runner of white background mottled with green set into a dark terrazzo border. This was chosen because it is resilient, quiet and comfortable to walk on. The same type of floor is used in the nurses' stations. It is

Left: One of the operating rooms on the fifth floor which is devoted to surgery. The walls are painted in restful greens and browns. Terrazzo extends from floor half way to the ceiling. Below: The overbed table conceals a make-up box that may also be used as a book rest.

water-waxed and polished and presents a beautiful appearance. Double glass doors shut the lobby off from the corridors when it is necessary.

One wing of the fifth floor is devoted to surgery. In this department there are three major operating rooms, one minor operating room, a surgical workroom, a scrubup room and a dressing and locker room with adjoining shower baths for the surgeons. Operating room walls are painted in restful greens and light browns. The terrazzo is extended from the floors half way to the ceiling with the remainder of the walls and ceiling painted in corresponding tints of green and tan. The surgery lamps are of the counterbalanced, suspended ceiling type. A different type is used in each of the three major surgeries, since the doctors are divided in their preferences. All lights are operated by means of non-sparking wall switches.

In the x-ray department are located the cystoscopic operating room, deep therapy room, fracture room where all casts are applied, a dressing room for out-patients, the roentgenologist's office and the darkroom.

In the other wing of the fifth floor are two labor rooms, two delivery rooms, with toilet between, a small sterilizing room, a scrubup room and a restroom and dressing room for obstetricians. The walls in the delivery rooms, as in the surgeries, are of terrazzo a good part of the way to the ceiling.

On the sixth floor are living quarters and showers for resident physicians, orderlies and engineers.

All supplies are requisitioned from the central control room, which is located in the basement. Trays for surgical purposes, as well as for extra supplies of ice cubes and hot water bottles, are sent from this room by means of dumb-waiters. The laundry, linen room and pharmacy are located in the basement. Linen supplies and drugs are sent out from the control room. Other rooms in the basement are the purchasing agent's office, engineers' workroom, boiler rooms, help's dining room and sewing room, and a classroom.

Because of the long years of waiting for the new hospital to be finished as few improvements as possible were installed in the old building, part of which had been a hospital for forty-eight years and a home before that. Thus the contrast between the old building and the new was great. This was especially marked when the change to the new hospital came. One morning we opened as Nichols Memorial Hospital in a shabby dilapidated building; we closed the day under an entirely different name in a beautiful building equipped with every modern convenience. It was as though we had burst from a chrysalis into a broader world of opportunity.

Accounting for the Hospital

C. W. MUNGER, M.D., and C. G. ROSWELL, C.P.A.

HOSPITALS are giving increasing recognition to the advantages to be derived from accounting departments that are adequately staffed and equipped to record, in sufficient detail, the financial and statistical information pertaining to their activities. The transition from the old to the new in accounting methods was stimulated in New York to a great extent by the United Hospital Fund since, in order to compile the annual report required by the fund before its yearly allotments to hospitals, it is essential that income and expenses be analytically recorded. The American Hospital Association's successive committee reports and published manual have similarly guided hospital accountancy all over the continent. The accurate prorating of expenditures that these systems require has obliged participating hospitals to keep accurate departmental statistics.

Only Prompt Reports Have Value

This combination of detailed operating accounts and service department statistics offers a wealth of information which, if used discriminately by the hospital accountant, will provide an ideal monthly report. The word "discriminately" is used advisedly, since hospital administrators do not, as a rule, have sufficient time to absorb all the statistics and accounting data that could be made available. Therefore, the accountant or comptroller renders a most important service if he submits only such information as enables the administrator to determine the fiscal functioning of the hospital. To be of any appreciable value a report must be rendered promptly. Unless the problems disclosed by such a report are discussed with department heads or board members before the information becomes ancient history, the report loses most of its usefulness.

The monthly statement of revenue and expenses is one of the most necessary reports. In this statement, it is helpful to have comparative figures that enable one to note at a glance any unusual increases or decreases. The section relating to operating income can best be studied in conjunction with a statistical report on the activities of the hospital. One can then determine to his satisfaction that the decrease in private patients' board, for example, was the result of a decrease in private patient days. The same applies to income from the special service departments which, as a rule, fluctuates directly in accordance with the amount of work done.

The monthly profit and loss statement should disclose, also, the value of services rendered to free patients and to endowed bed patients. In addition, the administrator should know the value of allowances made to various patients and the reasons therefor.

The balance sheet is prepared monthly in practically every institution. It should be accompanied by comments from the accountant explaining the changes in the financial status of the hospital. For instance, a hospital administrator is always interested in knowing whether or not the balance of current cash is going to be sufficient to allow him to meet the next month's pay roll and also satisfy those creditors who threaten to charge interest unless their bills are paid immediately. In rare instances, it might even be necessary for the accountant to point out that the cash in banks is more than will be required for current operating purposes and to advise that a certain amount of it be invested.

Information, such as the ratio of current assets to current liabilities and the percentage of accounts receivable not covered by a reserve for bad debts, might also be pointed out by the accountant.

If the hospital operates a perpetual inventory system, it is essential to know whether the stock on hand is increasing or decreasing. It is often necessary to conduct an investigation in order to determine whether too much capital is being tied up in the storerooms or whether the purchasing agent is buying stock for which there is no demand.

It is important to know to what extent collections from patients are keeping pace with the charges made during the month. It is a simple matter to provide a bad debt reserve for uncollectible accounts but the main problem is to establish efficient collection methods in order that such a reserve may be kept at minimum.

The monthly report of budget performance is probably the most important accounting statement in the practical operation of the hospital. To be effective, it must be rendered in considerable detail and must show the monthly, as well as the cumulative budget standing of every department. Each department head receives such a report covering expenditures within his control and is requested to explain any increase in expense over and above the amount allotted in his budget. This is an important example of the statements that must be issued promptly if they are to be of any value to the administrator and department heads in controlling operating expenses.

Every department head should be kept posted as to his budget position.

Doctor Munger and Comptroller Roswell here describe various reports and statistical data that an administrator needs in daily contacts with trustees, department heads, medical staff and public

The authors are administrator and comptroller, respectively, of St. Luke's Hospital, New York.

Since he is to be held strictly accountable for expenditures in relation to his budget allowances, he should be given full budgetary information. Department heads should be warmly commended when reports indicate that they have effected savings in their operating expenses; when a contrary condition exists, the individual responsible should be required to explain.

Inasmuch as the annual budget includes anticipated income from patients as well as from endowments and other investments, it is necessary for the accounting department to prepare a statement showing actual income received from these sources as compared with the amounts anticipated by the budget.

Comparative Figures Helpful

It is almost impossible for the busy administrator to absorb all the statistics that could be submitted on the work done by the various departments. However, a considerable amount of this information can be broken down into units which, if submitted on a comparative basis, will enable him to obtain the true picture of conditions at a glance. For instance, instead of reporting 10,000 visits to the out-patient department for January 1939 as compared with 9000 for the same month of 1938, and also the gross amount collected in fees for the same two months, it is more helpful to submit a statement of the average income per visit for the month of January 1939 as compared with the average income per visit for the same month of the previous year. This principle applies not only to the out-patient department but to reports on nearly every department of the hospital. As an example, it is easier to interpret the average cost per meal served during a month as compared with the previous month or for the same month in the previous year than it is to interpret all of the figures from which such a unit cost would be derived.

A few illustrations of the uses of unit figures that have been found helpful are:

1. Average income per patient per diem for private, semiprivate and ward patients.

(*Continued on next page*)

Plan of Intern Training

CARL P. WRIGHT

IN LARGE hospitals in which residents are in charge of the various medical services, the problem of assimilating the new intern and supervising his work is relatively simple. The resident, usually chosen from the intern group of the previous year, takes the responsibility for this service and the newcomer joins an already well-organized unit.

In the small hospital, however, the problem is more complicated. Each year a new group of interns is inducted into the work, usually with the assistance of a busy superintendent who may or may not give the matter the best possible consideration. There are thousands of small hospitals that have a wealth of experience available to interns if some competent person in authority will assume the responsibility of seeing that they get it.

Much has been written pro and con in regard to paying interns. No worth-while hospital executive wishes to exploit interns but there is a feeling among senior medical students that hospitals offering financial inducement do so to hide a lack of adequate professional opportunity. As a result many good hospitals offer no financial remuneration.

There are no residencies at the General Hospital of Syracuse and I realized that my training and experience did not warrant acceptance of the responsibility of proper intern training. After a conference with the executive committee of our staff, we arrived at a happy solution of our problem by creating the position of director of intern education. We are fortunate in having as an assistant in medicine, a physician who is especially interested in teaching, young enough to remember the intern's point of view and old enough to have had the experience essential to the position. While remuneration was a minor consideration, we decided to pay a modest monthly allowance.

Mr. Wright is superintendent of the General Hospital of Syracuse, Syracuse, N. Y.

In addition to being the director, this doctor is a member of the intern committee, thus having a part in the selection of the interns and a knowledge of their abilities.

Internships are started on July 1 each year and, as soon as possible after arrival, my assistant and I meet with them to talk over matters in general and to explain what is expected of them in regard to charts and behavior. We review the rules and regulations and explain the reasons for our hospital routine and procedure. The director's position as their professional adviser and supervisor is outlined.

Special Interests Satisfied

Following this conference, the director talks with the interns, singly or in a group, reviews the book of professional procedure that he has prepared and outlines the reading and study he will expect during their twelve months' internship. He then arranges their services and places them with their respective attending physicians.

Our attending physicians, surgeons and obstetricians cooperate with the director, keeping him informed of the interns' progress and assisting in the unification of their education and experience. The director holds frequent conferences with the group, encourages them to discuss their cases and acts as their counsel and guide.

In the early part of the internship, the director asks the group for a list of medical or surgical procedures in which they are particularly interested. He then arranges with the staff member specializing in the particular procedure to give one or more lectures to the interns. These lectures and the discussions that follow are an important part in the training.

The interns soon recognize that every effort is being made to correlate their work and study, quickly adjust themselves to the routine and generally enjoy an interesting and fruitful internship.

Accounting for the Hospital

(*Continued from preceding page*)

2. Average per diem operating expenses in the same classifications.
3. Average per diem operating profit or loss in the same classifications.
4. Average cost of supplies requisitioned per patient day in each nursing unit.
5. Average cost of drugs requisitioned per patient day in each nursing unit.
6. Average direct cost of x-ray examinations as compared with the average income.
7. Average direct cost per surgical operation as compared with the average income.
8. Average amount of special services written off on group hospitalization cases per patient day.

This list is not all inclusive but should illustrate the principle under discussion.

Accounting departments are often responsible for the statistics kept by the hospital and such statistics, properly presented, can be illuminating. For instance, private patient days may be classified as: (1) general, (2) group hospitalization, (3) endowed bed and (4) courtesy days. Semiprivate patient days may be reported as: (1) general, (2) group hospitalization, (3) compensation, (4) endowed bed and (5) courtesy days. Ward patient statistics may be divided into: (1) pay or part-pay, (2) compensation, (3) group hospitalization, (4) city cases, (5) free patients, (6) endowed bed patients, (7) employes and (8) courtesy days.

Reports Indicate Trends

These statistics may be further classified as to the services to which patients have been admitted, *i.e.* medical, surgical and maternity. With this information it is possible to show in a monthly report such important trends as the percentage of free ward days to total ward days and the percentage of group hospitalization days to the total semiprivate days. It is also helpful to know the percentages of occupancy of the various units of the hospital, their average daily census and their average stay per patient. The hospital's census sheet, if properly devised, will provide the basic material for these analyses.

Information that can be reported on a unit basis, as well as data that are purely statistical in nature, can often be shown to advantage in graphs or charts. A bar graph showing the average cost of supplies requisioned per patient day in each nursing unit is available to every nurse and doctor in St. Luke's Hospital. On this graph is also charted the cost of breakage on each unit. Showing these expenses pictorially has had a splendid psychological effect and is resulting in added economies.

Miscellaneous Services

Graphs showing the average cost of meals served from the various kitchens are prepared regularly. They are designed to cover a period of six years. In addition, the trend of our patient days in the private, semiprivate and ward pavilions is also illustrated on graphs. Special statistics are kept covering the number of private and semiprivate patients referred to the hospital by the attending doctors. These data are assembled in a comparative bar graph and have created considerable interest, not to say competition, among the staff members.

In addition to the preparation of financial and statistical reports, graphs and charts, an accountant may render numerous miscellaneous services, a few of which merit mention.

The administrator should be periodically advised regarding the adequacy of the hospital's insurance coverage.

The accounting department is in a position to report overlapping of employment periods owing to the hiring of an individual prior to the date his predecessor left.

Since modern business tends toward the use of specialized machines, an accountant can render a distinct service by familiarizing himself with all types of business equipment so as to be able to recommend such equipment or to report it impractical.

The accountant should obtain cost reports from the various maintenance units that will enable him to determine how the cost of a certain job done by hospital employes compares with the cost of the same work if done by an outside agency. For instance, carpenters are often requested to make certain types of furniture that could be purchased outside at less actual cost. Unless adequate records are kept as to the cost of such jobs, it is impossible to ascertain just where to draw the line. This need for "job cost" applies also to the power plant, upholstery department, printing department and to many other service units in the hospital.

It is not at all unusual for a single institution to spend over a million dollars annually in its operations. Therefore, it is not too much to expect that the accountant should have at his command not only the theoretical and practical knowledge of accounting but the principles of business administration. He needs to have a statistician's analytical mind, a credit manager's faculty for supervising credits and collections and a knowledge of commercial law.

Accounting Covers Hospital

Hospital accounting is no longer centered at the cashier's window but touches, in some form or other, practically every activity in the institution. The accountant must, therefore, have the ability to correlate and control the vast amount of statistical and financial data that originates in these units.

Our institutions can hope to match the strides made by modern business in its efficient control of expenditures and operations only if they have accounting departments that function both as recording mediums and as sources for rendering the many reports and special services needed for wise management. The accountant must approach his task objectively and render his reports without fear or favor. The value of his department, however, is largely dependent upon its adaptability to the problems and aims of the hospital and its administration.

Presented before the New York Conference on Hospital Accounting, 1939.

Building for the "Long Pull"

Private Sanitarium in Public Interest

JAMES Q. SIMMONS JR.

INSTITUTIONS live for centuries when their original policies are sound. Making friends may be a long and laborious process, no less for an organization than for an individual. In both cases it is based upon seeking out what another wants and giving it to him.

Administrators of voluntary hospitals realize this. So also do directors of well-run private sanitariums. For unless the private sanitarium has all the qualifications of a good small hospital and something besides, there is no excuse for its existence. The hospital would fill the need.

Sanitarium guests expect homelike surroundings, an informal lobby, attractive dining rooms and bedrooms and such additional accommodations as music and game rooms. A physician must be available at all times, and there must be provided a consulting staff, a good laboratory and x-ray department, a small but completely equipped operating room and usually some well-developed special treatment, such as physical or occupational therapy. Well-kept grounds also are necessary to a pleasant atmosphere.

Most important of all assets to the private sanitarium is a versatile and competent staff of nurses and other workers. The sanitarium head can provide an atmosphere of wide and pleasing variety for his institution by careful selection of personnel. Nurses from various countries with a knowledge of the language, music and folklore of their native lands; someone who plays the piano or sings well; someone interested in art or in amateur dramatics or in writing; a floor girl with a Scotch burr or an Irish brogue; a porter with an amusing drawl—all these can contribute effectively to a cordial atmosphere.

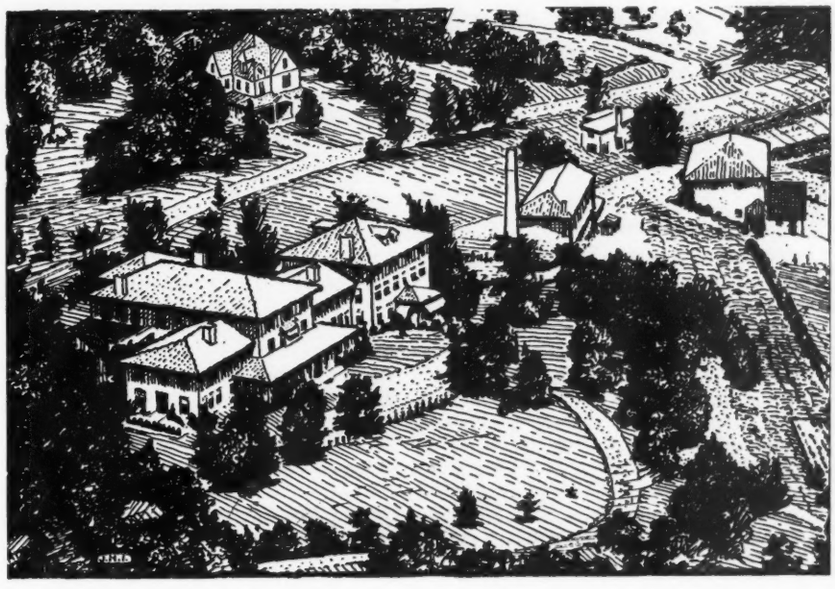
Medicine, it has been claimed, is 75 per cent personality. In the sanitarium every employe must be able to make every patient feel that the entire organization is for his especial benefit. Every effort should be made to arrange things to the patient's liking—his room, quiet, treatment and food time. He should be protected from visitors he does not want. When it is desirable to have the patient do something, suggest, infer, mildly urge or cajole—but never order. No employe should ever display annoyance; part of the service rendered is understanding and tolerance of unusual behavior.

Complaints should receive attention immediately. This is important. Complaint departments are maintained by progressive concerns to find out wherein they are wrong. Every complaint, however trivial, should be noted on a form provided for the purpose and collected by the nursing supervisor to be coordinated and listed for easy consideration by the proper head or group.

A strict censoring of behind the scenes discord must be made. No patient must be aware that the head nurse is disliked or that another patient does not pay his bills. The employes' attitude must be helpful and friendly but never intimate.

Early orientation is important. Activity outlines should be given the patient as soon as possible after admission. The patient has a feeling of security if he is informed that he is or is not to remain in bed, when his treatments will start, when he will be examined, whether he may visit or be visited, whether he may walk out. If there is a difference in the approach of Doctors A, B and C the difference must be fought out behind the scenes, a victor acknowledged or a compromise reached. The patient must feel that he is being given coordinated and definite treatment by the entire staff.

The patient usually has a story to tell and will never feel properly



Hillsview Farms Sanitarium, a private institution at Washington, Pa.

Mr. Simmons is on the staff of the Hillsview Farms Sanitarium, Washington, Pa.

taken care of until it is told. Arrangements must be made for other history takers to hear this story if the doctor cannot get it directly. Physicians and head nurses must make memoranda; memory is undependable. Doctors often promise treatments or medications and delay transfer of the order to the proper executive. Among ill persons confidence in others is easily dissipated.

Personnel must be trained and its supervision must be rational. The average hospital nurse, without additional training in a good hospital for nervous diseases, is ill-fitted for supervisory work in the private sanitarium. Her accustomed handling of student nurses does not enable her quietly to coordinate the work of a graduate body. She should not insist on being a top sergeant when a coordinator is needed. It is possible to make people want to do things, not just force them to act.

Personnel should be given instruction in approach, manner and method acceptable under given circumstances. Instruction is needed in appearance and in posture. Health should be stressed among workers in a health institution. Persons who always look dragged out or frowsy should be weeded out. They are not making proper distribution of their energies and are a financial hazard to the institution.

Persons trained in the scrupulous care of pennies often lose their sense of balance. I once heard a patient complain bitterly of being charged for a box of matches. He said, "There's a little old woman near home who gives a box of matches just like this with every 15 cent pack of cigarets and I have spent a thousand dollars with you." He developed an antipathy for the institution in question out of all proportion to that original 2 cents. Newspapers, periodicals and matches can be supplied free if the cost is considered in the original price of the room.

Unless these methods of establishing the acceptability of the sanitarium commodity are followed there is little need to consider methods of winning community good will. Yet prospective purchasers of the sanitarium commodity must be reached. The usual advertisements in the medical magazines are taken as a matter of course. There are also periodical literature, cards, letters and announcements to physicians, but this article is to emphasize the indirect, long term, good-will methods of advertising.

Members of the staff and personnel should feel privileged to invite friends to visit the institution, especially those who will discuss hospital services with others, such as nurses, teachers, musicians, and social workers. Outsiders should be asked in to give entertainments for the patients and other entertainments should be provided to which outsiders are invited.

If the sanitarium has an occupational therapy department, there will be periodical sales of the objects made and tea may be served to those who come. It is a good plan to encourage a group of doctors' wives or professors' wives or women interested in community betterment to consider the sanitarium their special interest.

The private duty nurses who work at the sanitarium not only may be valuable assistants while there but may be good-will builders while away. It is an excellent plan to spread the work so that a maximum number will be on duty at the institution during the year and thus will be acquainted with its services.

Finally the medical staff of the sanitarium must do its part to educate the public by giving a proper definition of the institution, explaining how it serves and what its place is in preventive medicine.

Staff members may be encouraged to speak before women's and service clubs on medical problems, particularly on angles of current interest, such as reducing diets and cosmetics.

The sanitarium cannot hope to succeed without the good will of physicians in the community. They must be made to feel that the sanitarium is a service they cannot do without, that it is a community institution established to serve them and is not in competition with them.

Sanitarium staff members should make contributions before medical society meetings and should enter into the discussion of other papers. Meetings may be held at the sanitarium to give firsthand knowledge of the services it offers. If there is a medical school near by demonstrations for the students may be arranged. The same applies to colleges in which premedical work is given.

The problem of the private sanitarium, then, is to perfect the service given to patients and then to bring it to the attention of its potential patrons by the employment of indirect educational methods.

Keeping Nurses Out of Court

NURSES and other hospital employes find it extremely difficult to take vacations. Yet they often are forced to take time away from their work and wait for hours, even days, to give legal testimony which ordinarily consumes only a few minutes. Patients' lives are endangered. Furthermore, any compensation that they may receive is hardly adequate.

In the federal courts the testimony of every possible witness may be taken as soon as the action is commenced before a notary public or commissioner of deeds. This practice should be extended to the state courts in which most cases are brought.

Nurses and other hospital employes should be permitted to give their testimony at a time most convenient to them, before a notary public or commissioner of deeds, instead of having to make a personal appearance in court. Attorneys should be permitted to cross-examine at this examination. After their testimony is taken, many settlements may result as well as the granting of motions for summary judgment on the ground that there is no real defense to the action. This will in many cases avoid the necessity of a trial since a defendant, faced with positive proof, will be more ready to settle the case and avoid further expense and annoyance.—MEYER KIRSCHENBAUM, *attorney at law, New York.*

Challenge to Pediatric Nurses

RUTH BISHOP, R.N.

EVERY pediatric ward has its pet child. Doctors, nurses, ward helpers and maids visit him, tell him how "cute" he is and laugh at his antics. Between visits he occupies an empty crib or is given a few toys unsuited to his age or stage of convalescence.

When such a child tears his bed apart for something to do, he is laughed at for looking so "cute," while the child in the next bed, who does the same thing, is reproved (or spanked, if the supervisor is out of sight) for upsetting the neatness of the ward.

Health is not physical well-being alone. The same nurse who uses the most modern methods of nursing care may ignore all the findings of modern education, psychology and mental hygiene in her personal relations with a child patient.

A child who has been sick may develop into a neurotic adolescent and adult, craving sympathy or feeling inferior because he sees himself as different from others. If he has suffered a deformity he may fail to find gratifying activity that will prevent his psychological crippling. Such problems challenge the pediatric nurse.

The methods used to guide a child through sickness are essentially the same as those used when the child is well. The psychological care needed by the child in the hospital is not different from that needed in the home. Work with children is of little value unless it is rounded out by parental cooperation and education. The pediatrics department fails to complete its program unless it continues the guidance begun by the parent in the home and seeks to continue the hospital's program after the child's discharge. To maintain parental cooperation requires tact on the nurse's part.

What methods should the nurse employ to help the child adjust himself to situations that arise? Primarily the nurse must have respect for other persons, her co-workers as well as the children, even though their interests and attitudes do not coincide with her own. An even, cheerful disposition is necessary to gain the respect of children. Cheerfulness, however, does not refer to inappropriate laughter in the sickroom or to sentimental pollyannaism. Such a quality is present in a physically healthy and rested person, in one whose vocation satisfies him and whose outside interests refresh him from his daily work while bestirring and broadening his abilities.

Humor and imagination arise out of this cheerfulness and contribute to the insight needed.

A fourth attitude, honesty, is one that both nurses and doctors tend to violate more often than others. In order to persuade a child to lie quietly during a painful treatment the nurse tells him it will not hurt. Or if the child makes a request she does not have time to fill, the nurse lies rather than explain that she has other more important tasks to do. Honesty not only gains the child's confidence in the nurse but also teaches him to face situations squarely and bravely.

Certain situations in the hospital present special problems. Food difficulties are not unique with the hospital but sickness often adds the problem of apathy toward food in solid form. As the child's physical condition improves, the doctor increases the form and variety of foods the child may eat. It rests with the nurse to offer the food in such a way that mealtimes are pleasant for all concerned. Small servings satisfy a child's lessened appetite when he is returning to solid food. As his desire for food increases with his health the child can eat larger servings.

A child does not refuse food without cause. He may refuse to eat because his appetite is already satisfied, he may not be well enough for the food offered or he may think to gain

This little patient at Salem Hospital, Salem, Mass., is forgetting the woes of convalescence by means of large blocks that entertain without fatiguing him.

Miss Bishop is on the staff of the Strong Memorial Hospital, Rochester, N. Y.

An out-sized doll intrigues the baby and his companions at Abington Hospital, Abington, Pa.

attention by the refusal. In the last case the nurse should consider the meal ended with the refusal and, without comment or disapproving gesture, remove the food to the kitchen. To overfeed or to add food too rapidly does not build up the patient. Yielding to the child's intuition results in the increase of food in tolerant amounts and kinds. To force food on a child who is playing for attention fosters undesirable means of satisfying his desires and does not build him up physically. A few meals missed is a small price to pay for the later years of wide food likes and pleasant associations with meals.

Rest is especially important in improving the child's physical condition. Like food, the question of rest is encountered both in the home and in the hospital. The hospital enjoys an advantage in that a sick child finds the resting position pleasant. Later he sees those around him entering into the routine of rest in the afternoon, early bedtime and regular hour of awakening, and he enters into the program with little or no resistance.

As the child gains strength he becomes more active. He notes objects

Morton Hospital, Taunton, Mass.: Books with large print and many pictures make good bedfellows.

and people and happenings around him. His excess energy demands use. Books and toys must be provided. In choosing these books and toys there is a criterion besides age and previous experience with these materials, namely, the child's stage of convalescence. Detailed needlework proves too tiring because it requires closely coordinated activity. Books with large print and many pictures and toys employing large movements satisfy his need for activity without fatiguing him; at the same time they keep his imagination active.

Almost as soon as this excess energy becomes apparent it can be used toward achieving the independence so dear to every child's heart. The moment he shows an interest in taking off a stocking or combing his hair, let him do it while the joy of the first impulse is there. The nurse's speed suffers temporarily but in a while that child will save her time and later his mother's time by doing more and more for himself.

The road to self-reliance will be by no means straight and smooth. One day the child will do everything for himself of which his age group is capable; the next day he will do nothing. His physical fatigue and his unformed habits contribute to this irregularity. The wise nurse allows some leeway for both causes; she does not force the child, yet she tries to make him enjoy his achievements, perhaps by objective, impersonal praise.

The problem presented at the opening of the article remains untouched. Favoritism is at odds with all the attitudes necessary for those working with people: respect for personality, even disposition, honesty, humor and imagination and, paradoxically, love. Favoritism arises out of the adult's sense of possession because the child favors him or, parrot-like, repeats meaningless phrases. Favoritism that encourages acts that are undesirable as habits, that encourages immaturity rather than development or affectation rather than spontaneity is not love. To abolish favoritism requires that selfish indulgence in personal desires be replaced by objective social contacts. One who is really fond of children shows no favoritism. As near as is humanly possible she shows her fondness for all alike and causes no injured feelings.

The way to get along with children is not different from the way to get along with adults. The same fundamental etiquette should exist between adult and child as between adult and adult.

A child's stay in the hospital is an important episode in his life. It may be impoverished by a staff trained only in reestablishing physical health or it may be enriched by a staff that reestablishes physical health and seeks to build up mental and emotional health as well.

What Form of Government Have You?

ADA BELLE McCLEERY

THE modern administrator acts as a balance wheel, the function of which is to regulate motion. The chief executive of a hospital must maintain a balance between four distinct groups: the governing board, which is disturbed by red ink; the medical staff, which requests the latest type of equipment, up-to-the-minute scientific discoveries and an abundance of competent personnel; the employes, who desire good food, reasonable working hours and the best of pay, and the patient, who demands skill, service and attractive surroundings at a low price.

Good organization has to do with working conditions, personnel relationships, working materials, working equipment and the scope of the job of each individual. It associates activities according to the principle of use and also ties together the various activities that are necessary if the predetermined objective is reached.

The association of activities according to the principle of use means, in hospitals, the separation of professional and nonprofessional responsibilities, each of these larger groups being subdivided and combined as their relations warrant.

After the objectives are decided upon, the methods or policies to be followed in accomplishing the objectives must then be determined. For instance, the policy to be followed in employing workers or in paying bills should be decided before workers are employed or bills are contracted.

In good organization the responsibility for each activity is definitely known in whatever manner that activity may be divided and each individual knows who is his immediate superior. A procedure must be established for each activity. An illustration would be the manual of instructions given to the switchboard operator.

Such a manual would include the preferred methods of handling incoming and outgoing calls and of locating doctors, interns, administrative staff or friends of patients. It would include also instructions to be used in case of emergencies, such as failure of electric lights or an alarm of fire.

In some instances the instructions may be oral but, unless the group is small or the instructions are brief, manuals or written instructions will save time and reduce misunderstandings. Moreover, they will help to eliminate friction and friction should be minimized as far as possible in person to person relationships.

There are three principal types of organization: straight line, line and staff, and functional structure.

The simplest organization structure is the so-called straight line. Under it authority travels straight up and straight down. The line system of structure has much in its favor: it is definite; under it coordination reaches the maximum; changes in policy may be made quickly because there is a minimum of red tape.

Its weakness lies in the fact that communications do not always travel either up or down but are often sidetracked somewhere along the line. There are cross-ties and cross-currents for which channels of communication must be kept open. Sidetracking when orders travel downward may affect the productivity of a department, and sidetracking of complaints or suggestions traveling upward may bring a day of reckoning.

The manner of organizing the nursing service is a straight line structure. There is the director of the nursing service. Under her is the supervisor of a division; under the supervisor is the head nurse in charge of a floor or ward, and under the head nurse is the staff nurse. In the smaller hospitals the head nurse is responsible to the director, thus eliminating the position of supervisor.

The second type of structure is known as line and staff. It retains the principles of authority and responsibility of the line but has, in addition, an advisory staff. Such a staff studies all problems, either operating or technical; recommends standards of various types, and checks performance through the study of records and statistics. However, this staff has no executive authority because it is only advisory.

Five Trends in Organization

1. **To select as a chief executive one who is capable of analyzing and studying problems.**
2. **To delegate more responsibility and authority to subordinates. The number of persons reporting to a superior officer should be limited.**
3. **To make all members of an organization more conscious of responsibility. Each employe should have his responsibility stressed again and again. Each one is a member of the hospital family and has a part in carrying out its objectives.**
4. **To classify activities scientifically.**
5. **To control efficiency by establishing incentives for greater productivity. This may be done through studies stimulating pride in accomplishment, through increases in pay and through promotions.**

Miss McCleery is administrator of the Evanston Hospital, Evanston, Ill. This is an abstract of a paper given at the Minnesota institute.

It is more difficult to give an illustration of line and staff structure in a hospital because often the one who is making studies has executive duties as well.

The third type of structure is called "functional" and under it each person is given as few functions to perform as possible.

Although purely functional structure is not in common use, it is found frequently in modified form because it has much to offer in specialization. The surgeon in the operating room is in a functional capacity as far as the other workers are concerned. In a large laboratory the chief bacteriologist has functional responsibility over the assistant bacteriologists. On the whole we have few purely functional structures in hospitals.

The grouping of workers under a single executive is called departmentation and the need for departmentation is realized as soon as the business becomes too large for a single controling head to supervise each individual worker.

Many of our hospitals are organized on a modified functional departmental basis, the line structure being followed within the department and from the department head to the chief executive, while the functional is followed as far as duties are concerned. This type of structure is necessary partly because of the size and partly because of the diversified activities of a hospital.

It is obvious that no organization plan can be made to fit all hospitals. It must be adapted to the hospital in which it is to operate.

One of the fundamental principles of a good organization is the support of the organization by the by-laws of the society sponsoring it. The by-laws are the foundation and the organization is the superstructure.

Modern practice is to keep by-laws as simple as possible. Hospital by-laws usually cover such items as: name, fiscal year, membership, meetings, quorum, number and responsibility of governing body, officers and their duties, conduct of elections, standing committees, appointment and duties of chief executive officer and appointment and duties of medical staff. Additional articles are dependent upon the local situation.

One function of hospital by-laws is to fix responsibility. The responsibility for the operation of the hospital, therefore, is placed upon the trustees. This responsibility is twofold: (1) to maintain sound business principles and (2) to give the community good professional service. Sound business principles must be applied not only to the balance between income and expenditures but also to the amount of medical service supplied to those unable to pay.

The trustees also are given a legal responsibility when they are given the authority to appoint the medical staff. In making these appointments, they set the standard for the professional work. Because of this responsibility the trustees must be kept informed of the character of the professional work just as they are kept informed of the financial condition of the hospital.

The board of trustees appoints the chief executive officer, giving him the authority for the detailed management of the institution including employment of the personnel. In actual practice the trustees outline general policies and the chief executive officer administers them. Written reports should be made to the board by the superintendent at regular meetings. In addition, the administrator should be prepared to answer questions and should expect to furnish data upon request. Usually, the more the board knows about the hospital the greater is the interest of individual members.

One of the principles of management is control, which means that the administrator knows what needs to be done to carry out the given purpose and, in general, what is being done. He should know the degree to which what is being done affects the end result. He should know, also, how to make necessary adjustments in his organization.

The administrator must be willing to delegate authority to his subordinates. A good rule to remember is "where responsibility is placed give authority also." In hospitals, as in any other organization, there are three principles to keep in mind. The first is to delegate responsibility; the second is to give authority, making it possible for the responsibility to be carried out, and the third is to exact an accounting. Accounting shows how the responsibility is being carried out and if the authority given is being exceeded. There is a temptation to run away with authority. For that reason both responsibility and authority must be defined clearly and checked at frequent intervals.

Birthdays Are Holidays

SEVERAL hospitals have adopted a policy of giving a holiday to each employe on his birthday; at first sight, it may seem stupid to add such a perquisite. There are employers who believe that it is unwise to add benefits other than those in a wage envelope or salary check, but industry has adopted a number of devices during the past few years for the improvement of morale of personnel, and the hospital field might do well to follow the example.

Most hospitals are in the business of losing money for public health and public welfare but it does not follow that hospitals can expect their employes to work for substandard wages, nor can hospital workers continue to bear the financial burden of hospital care deficits. However, under the peculiar circumstances of peak loads and emergencies that must always characterize hospital work, employes of hospitals are likely to be more appreciative and less suspicious of all efforts to improve their conditions of employment.

The "birthday off" plan may be followed with little extra expense. When a birthday falls on a Sunday or on another holiday, another day is usually allowed and it is customary for the department head not only to keep the details of record but also to use his discretion in designating the day according to the needs of the hospital. Some hospitals extend the privilege only to those who have been employed one year or more.

What to Expect at Institute

GERHARD HARTMAN

AN INSTITUTE may be defined as a refresher course in the field of hospital administration. It is usually of two weeks' duration, conducted at a university and designed primarily to keep administrators professionally fit. Such a course is offered under the guidance of hospital administrators and is offered exclusively to those who are actively engaged in the management of institutions.

The institute consists of three distinctive types of instruction: (1) lectures by recognized hospital administrators and professionally qualified specialists; (2) field trips to a number of hospitals in the metropolitan area in which the institutes are offered, and (3) panel discussions, usually held in the evening under the chairmanship of an administrator qualified to discuss the designated subject.

The hospitals used in the field trips are carefully selected and the departments that offer the presentations to the administrators are carefully instructed not to present wordy descriptions of operations or merely to guide the visiting group through the departments for an observation of the equipment and facilities. Rather, the hospitals are requested to give demonstrations that really are demonstrations in the true sense of the work. Action is the keynote, with a verbal account of the department's or division's activities as a supplement to the visual presentation.

Panel Discussions Popular

The panel discussions provide an opportunity to coordinate the lectures and field work with the actual problems of the administrator and serve as a clearing house for the full and intelligent discussion of the problems that seem most urgent to the administrators in attendance. Incidentally, they provide an excellent opportunity for those planning national and state hospital association meetings to sense the more vital issues confronting administrators at any one time and thus to aid in the planning of subsequent conventions and meetings.

The type of instruction at the institutes is different from that given at conventions in which speakers are brought to address the group for from fifteen minutes to half an hour. The institute provides for a fuller and more complete discussion of a subject, usually over a period of two hours, on consecutive days. This longer time period allows for ample discussion by the student body of the subject matter presented and of the particular problems of individual students.

Individual and Group Conferences

New developments and new aspects of the student-teacher relationship have also been experimented upon. Arrangements have been made for special individual or group conferences with guest lecturers and outstanding administrators in the community so that students have the opportunity to discuss their problems fully and independently with outstanding authorities. At the University of Chicago last year arrangements were made with 12 administrators to m e e t the g r o u p by appointment at predetermined intervals to discuss such problems as new hospital construction, nursing education, business office management and hospital financing.

The faculty at institutes is carefully chosen. Recognized leaders in each aspect of administration speak to the group and conduct the panel discussions. Speakers are requested to prepare their talks in advance. These are then mimeographed and distributed to the students. Students are thus relieved of the burden of taking full notes and instead make brief observations and marginal comments as the speaker presents his subject. The students refer to these notes as a basis for intelligent participation in the subsequent discussion without misinterpreting the speakers' comments and observations.

The first institute in hospital administration was started at the University of Chicago by the American Hospital Association in 1933. The leaders behind the inauguration of the Chicago institute were Asa Bacon, Michael M. Davis and Dr. Malcolm T. MacEachern. Subsequent institutes were patterned in a general way after this one.

The American College of Hospital Administrators is the national organization interested primarily in the educational needs of administrators. The college officers felt that such a program was most urgently needed on the West Coast. In 1938 the first institute for the 11 western states embraced in the Association of Western Hospitals was held at Stanford University.

First Sponsored by University

For the last three years an institute has been offered at the University of Minnesota. Originally of two days' duration, it was amplified during the past year and extended to a six day meeting, conforming in educational pattern and character to that offered at other universities. There was a material increase in the attendance with the extension of the institute to six days, which indicates that the day is past when it is necessary to experiment with the two day type of refresher course program. Incidentally, the University of Minnesota Institute is the first offered under the primary sponsorship of a university. This development is significant.

At the present time plans have been completed for the conduct of an institute at Duke University, Durham, N. C., during the summer of

Mr. Hartman is assistant professor of hospital administration at the school of business, University of Chicago, and executive secretary of the American College of Hospital Administrators.

Status of Institutes in 1939

	Chicago	*Western*	*Minnesota*	*Southern*	*New York*	*New England*	*Pan-American**
INAUGURAL DATE	1933	1938	1936	1939	1939	1940	1940
PLACE	University of Chicago	Stanford University	University of Minnesota	Duke University	Columbia University	Harvard University	University of Puerto Rico
SPONSORING ORGANIZATIONS	A. H. A. A. C. H. A. A. C. S. A. M. A. Chicago Hospital Council	A. C. H. A. Assn. West. Hosp. Assn. Calif. Hosp. West.Conf.C.H.A.	Univ. of Minn. A. C. H. A. Minn. State Hosp. Assn.	A. C. H. A. S.E.Hosp.Conf. Carolinas-Va. and W. Va. Hosp. Conf.	A. C. H. A. Greater N. Y. Hosp. Assn.	A. C. H. A. New England Hosp. Assn.	A. C. H. A. Univ. of P. R. Insular Dept. of Public Health
UNIVERSITY AFFILIATION	School of Business, Univ. of Chicago	Office of Admin., Stanford Univ.	Dept. of Post Grad. Med. Education, Univ. of Minn.	School of Medicine and Univ. Hosps., Duke Univ.	Faculty of Medicine, Columbia Univ.	No action to date	School of Tropical Medicine, P. R. Med. Assn.
DURATION	2 weeks	2 weeks	1 week	2 weeks	2 weeks	2 weeks	2 weeks
FREQUENCY	Annual	Biennial	Annual	Annual	No action to date	No action to date	Annual
DIRECTOR	Malcolm T. MacEachern, M. D.	B. W. Black, M. D.	W. A. O'Brien, M. D.	G. L. Davis	Claude W. Munger, M. D.	H. M. Pollock, M. D.	No action to date
CORRESPONDING SECRETARY	Agnes McCann, A. H. A., 18 E. Division, Chicago	Thomas F. Clark, 1182 Market St., San Francisco	J. M. Nolte, Center for Continuation Study, Univ. of Minn.	F. V. Altvater, Duke Hospital, Durham, N. C.	Roger W. DeBusk, M. D., St.Luke's Hosp., New York	A.G.Engelbach, M. D., Cambridge Hosp., Cambridge, Mass.	Felix Lamela, SchoolofTropical Medicine, San Juan, P. R.

*Preliminary arrangements being completed.

1939 that will serve the 11 states south of Virginia and east of the Mississippi River. Also in the summer of 1939 an institute will be conducted at Columbia University. In 1940 institutes will be inaugurated at Harvard University and at the University of Puerto Rico at San Juan. The latter will be a Pan-American Institute, including administrators from all of the Latin American countries.

Each institute program must be planned with the educational needs of the administrators in the area in mind. For example, at the western institute the program gave special attention to the tuberculosis hospitals and convalescent homes. At the Minnesota institute the program was planned exclusively for the needs of the small hospital. At the southern institute special emphasis is being given to the needs of the administrators of small hospitals and, specifically, to proprietary institutions. The program at Chicago is much more general and attempts to embrace the needs of all types of administrators.

Administrators who attend the institutes come with a wealth of first-hand experience. The institutes take this experience into account and attempt not merely to add facts to it but to aid administrators to intellectualize such background and experience. The discussions are, therefore, on the problem level.

The research and reference library in hospital administration established at the University of Chicago is available for institute use. This library represents a careful selection of the best literature available in the hospital field with particular emphasis on the theory and practice of administrative organization. A manual, "Problems and References in Hospital Administration," has been prepared to stimulate and guide the thinking of hospital administrators.

Since the institutes are designed exclusively for hospital administrators and administrative assistants who are actively engaged in the administration of institutions, it is obvious that they are not programs for the training of those persons who desire to enter the field.

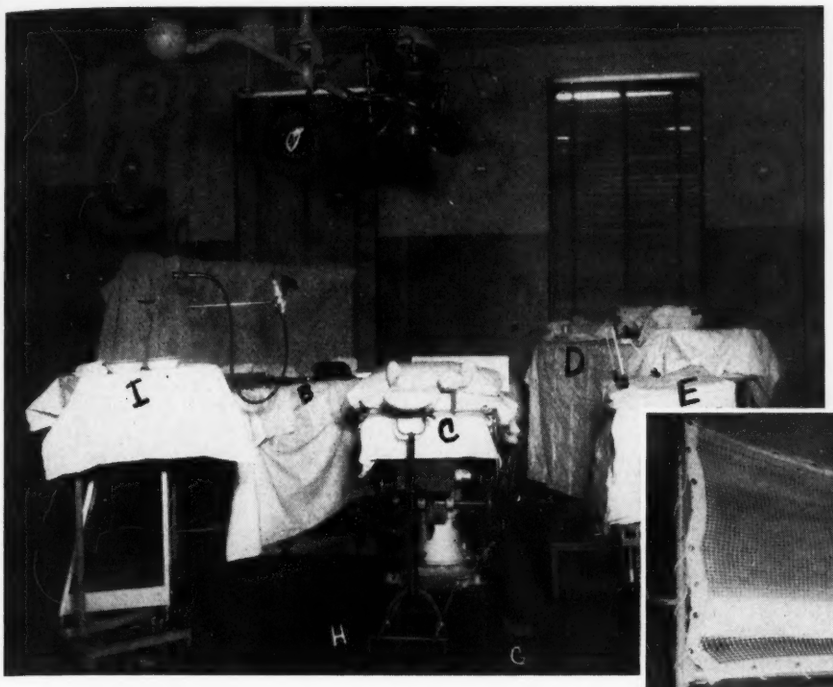
Attendance at institutes is limited to 100. University students and representatives of commercial firms, as well as persons engaged in industrial activities of a managerial nature, are not accepted for registration.

When the number of applications exceeds the number of persons who may be admitted, as happened at one institute in the past, acceptances are prorated, first, on the basis of the number of hospitals in the different states, second, on the basis of the ratio of sectarian to nonsectarian institutions enrolled and, finally, on the basis of the age and qualifications of the individual applicants.

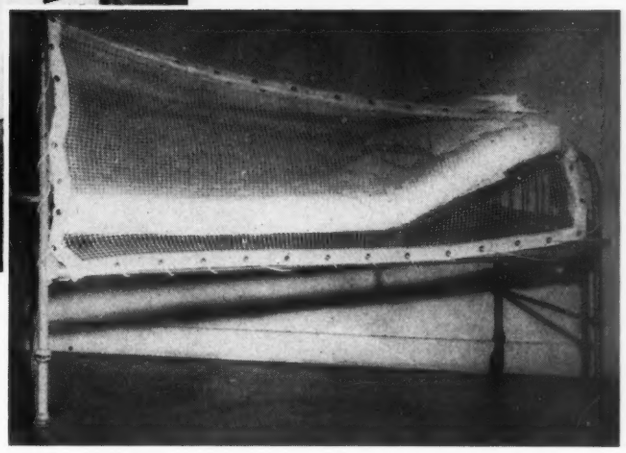
Experience has shown that institutes can be made completely or nearly self-supporting from the financial viewpoint. Every effort has been made to balance income with expenditures in order to assure the continuation of the institute program. The American College of Hospital Administrators has participated in underwriting deficits on a pro-rata basis with the other sponsors.

Opportunity is provided for 500 administrators to attend the institutes in existence during the year. Examined numerically, this means that 10 per cent of all administrators and administrative assistants will be in attendance at some outstanding university in a given year.

Totaling the number of hours that students attend lectures, field demonstrations and round tables, and comparing them with the number of hours in a normal university course for one full semester, the results show that the two-week institutes provide instruction of greater length than one full university semester.



Left: Figure 2 shows the setup of a neurosurgical operating room. The letters indicate: A, electric drill; B, instrument table; C, operating table; D, table of suture nurse; E, electrosurgical unit; F, battery for electrically lighted retractors; G, control of the electrosurgical unit; H, suction control pedal, and I, Mayo table.



Right: Fig. 1 — Bed sides of netting protect the patient without cutting off the air.

Care of Neurosurgical Patients

ERNEST SACHS, M.D.

NEUROSURGICAL patients constitute a hospital problem that differs from any other group of hospital cases. The problem is best considered under separate headings: (1) medical, including both the medical and surgical care; (2) nursing; (3) utilization of patients for teaching purposes, and (4) hospital administration.

Neurosurgical cases readily fall into several groups: (a) cases of injury of the head and spinal cord; (b) brain tumors; (c) spinal cord tumors; (d) neuralgias, trigeminal and others, and (e) miscellaneous cases, such as sympathectomies, peripheral nerve disorders, torticollis and von Recklinghausen's disease.

In some institutions neurosurgical cases are first studied and diagnosed on the medical or neuromedical services and then are transferred to the neurosurgical service for operation. As soon as the operation is over, and sometimes even before dressings can be dispensed with, they are sent back to the medical service. In other institutions the entire study and care of a neurosurgical case are carried on in the surgical service and many neurological cases suspected of being neurosurgical are also studied on the neurosurgical service.

The neurosurgical service of Barnes Hospital, St. Louis, falls under the latter heading. Since the care of many of these cases calls for special nursing, the question arises as to whether they should be segregated in separate wards. This problem has been solved satisfactorily by putting all the neurosurgical cases before and after operation into small units off the ward. Each unit accommodates from six to 12 patients and a nurse is always on duty. If the neurosurgical service is overcrowded, patients who do not require so much attention are put into the general ward. If the neurosurgical service is light, these beds are available for other types of cases.

Most patients with injuries of the head and spine are brought in by the police or are picked up by strangers. The cranial patients are frequently unconscious so that no information, medical or social, is obtainable. Their status has to be determined subsequently. A certain number of the patients with head injuries die within twenty-four or forty-eight hours without regaining consciousness and this constitutes a serious administrative problem.

In taking care of these patients certain precautions are necessary since the patient is unconscious or irresponsible. Many of them are disoriented, noisy, at times violent and usually incontinent. The patient

The author is associate surgeon in charge of neurological surgery at Barnes Hospital, St. Louis.

must be protected from injuring himself. Strait-jackets, as well as leather straps on the patient's ankles attaching them to the bed, are medieval and have never been used at Barnes Hospital. Boards on the side of the bed were found unsatisfactory as patients can climb over them or may bruise themselves by striking them.

We have made use of side canvases that are laced to the side of the bed and can be laced together over the patient so that he is perfectly safe. In hot weather these may cut off a good deal of air and, therefore, the hospital conceived the idea of making them of heavy netting (Fig. 1).

Most hospital beds are higher at the head end. Cranial cases are preferably dressed in bed and the surgeon can do this much more conveniently when he stands behind the patient than at the side of the bed. For this purpose the hospital provides what we have come to call "head beds." The spring is turned so that the back rest and other appliances are reversed (Fig. 1). Simply by changing the spring as many head beds can be provided as are necessary.

Since frequent blood pressure readings are desirable in head injury cases, all the nurses have been trained to take blood pressure. This is recorded on a special blood pressure chart and on the nurses' special notes which are supposed to be discontinued as soon as the patient has passed the critical period.

Patients with injuries or tumors of the spinal cord, especially those that are completely paralyzed, offer a special problem. Along with complete paralysis they are usually anesthetic and incontinent. The danger of such a patient developing bedsores is great. As soon as the condition is recognized these patients are put on an air or rubber mattress. Rings are absolutely forbidden on the neurosurgical service. The portion of the body that is in the ring is protected but the portion resting on the ring is more vulnerable.

The brain tumor cases are in the majority on the neurosurgical service and make the greatest demand on both the nursing and hospital facilities. Having one nurse constantly on duty in the small unit is of fundamental importance. In this way patients with convulsions can be carefully observed. Frequently the proper description of a convulsive seizure may give the surgeon the clue he requires in his treatment. The nurses receive special instruction from the chief and first assistant of the neurosurgical service on this and other matters pertaining to the care of these cases. Such instruction should be given by the senior member of the staff.

An essential part of every neurosurgical examination is a careful study of the eye fields. Since all examinations are made by the neurosurgical staff, room has had to be provided for that purpose. A small room, 7 by 6 feet, has been found to be sufficient to take care of a Bjerrum screen and a Ferree-Rand perimeter. The room is painted black and black gowns and gloves are provided for the assistants who make the examination.

No preoperative care is carried out in the wards except weighing the patient. This is of vital importance in calculating the anesthetic dose. In the last ten years we have used only tribromethyl alcohol as an anesthetic and one anesthetist handles the neurosurgical cases exclusively. Patients are put to sleep in their beds in the ward with the bed screened, and when they are asleep they are moved to the operating room and transferred to the operating table. Patients are put into their beds in the operating room after operation, since moving cranial patients unnecessarily may start vomiting and postoperative vomiting may bring on an intracranial hemorrhage.

The hair is cut with an electric razor; shaving is done by an orderly assigned to the neurosurgical service. The smooth running of the service in the operating room is greatly facilitated by this arrangement. Shaving, placing the patient in position and getting the lights adjusted are simple enough if handled by one person year in and year out, but if pupil nurses who change frequently have to do these things they find them trying and time consuming. An operating room provided with special equipment is assigned to the neurosurgical service at Barnes. The overhead multi-beam light is placed differently as the patient's head should be near the observation gallery (Fig. 2) and thus is not near the window. In addition to the overhead multi-beam light, two movable lights and a head light are used. In working in a deep cavity when the surgeon is doing an operation for a trigeminal neuralgia or an

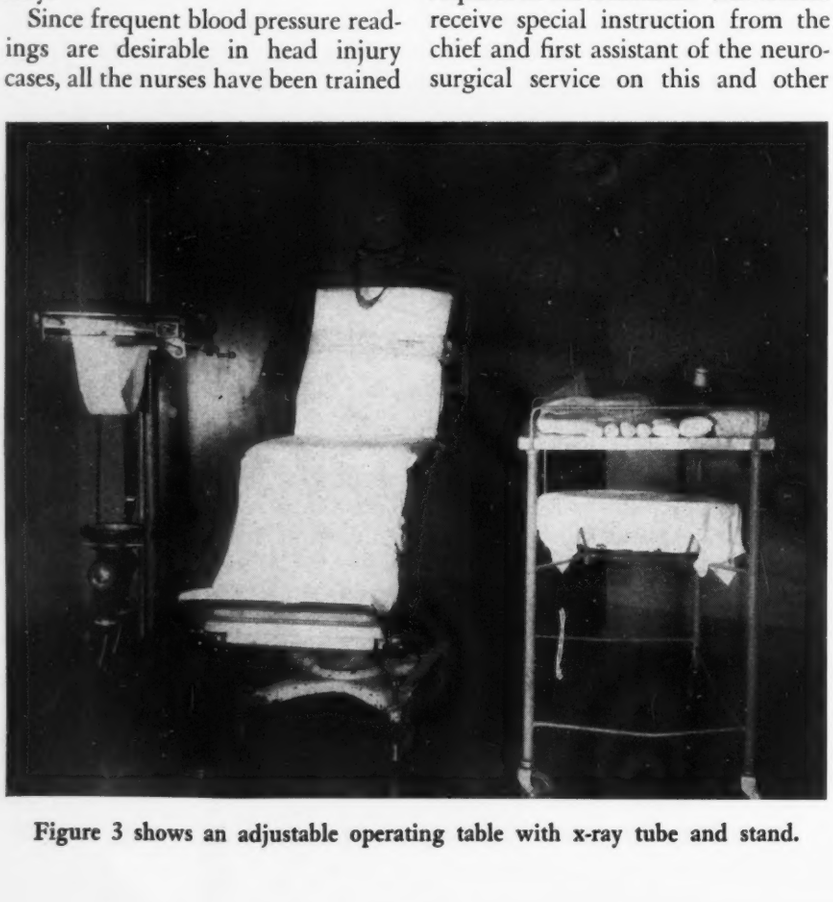


Figure 3 shows an adjustable operating table with x-ray tube and stand.

eighth nerve tumor, facilities to darken the room quickly are necessary. Head lights are much more effective in a dark room. For this reason also the walls of the operating room are a neutral green. The use of gray or green towels around the wound has not been found to be of any advantage. White towels permit any soiling of the field to be seen and corrected more readily. Extra wall cabinets have been provided so that all the instruments for neurosurgery and all dressings can be kept in the operating room. Nurses, therefore, never have to leave the room for added supplies.

The moving of patients from the anesthesia room to the operating room should be done as expeditiously as possible, both to avoid drafts and so that any sudden change in the patient, such as respiratory failure, can be taken care of promptly. For that reason the anesthesia room opens directly into the operating room, while other surgical cases have to be transported down a corridor.

There is no branch of surgery in which a meticulous technic is more necessary. To facilitate this, the nurses, assistants and surgeon scrub up together. The face masks contain a sheet of cellophane and the surgeon wears a special mask patterned after one used by de Martel of Paris. It contains a large piece of cellophane that is changed after each operation. Silk is the only suture material used and this is autoclaved, as are all the dry goods and instruments, but the silk is autoclaved for five minutes only. Repeated cultures have shown this to be adequate. Prolonged sterilization of very fine silk weakens it. Routine cultures of all wrapped packages are made once a month.

Neurosurgery today makes free use of electrosurgery and suction. Because two suction tubes may be needed at one time, a special electrically driven suction machine has been built at Barnes in addition to the regular suction tube that has an outlet in each operating room. Adequate provision for prompt artificial respiration must be at hand. Patients with marked increased intracranial pressure may suddenly cease breathing. A large tank that is connected with the positive pressure in the room is, therefore, kept in readiness. This

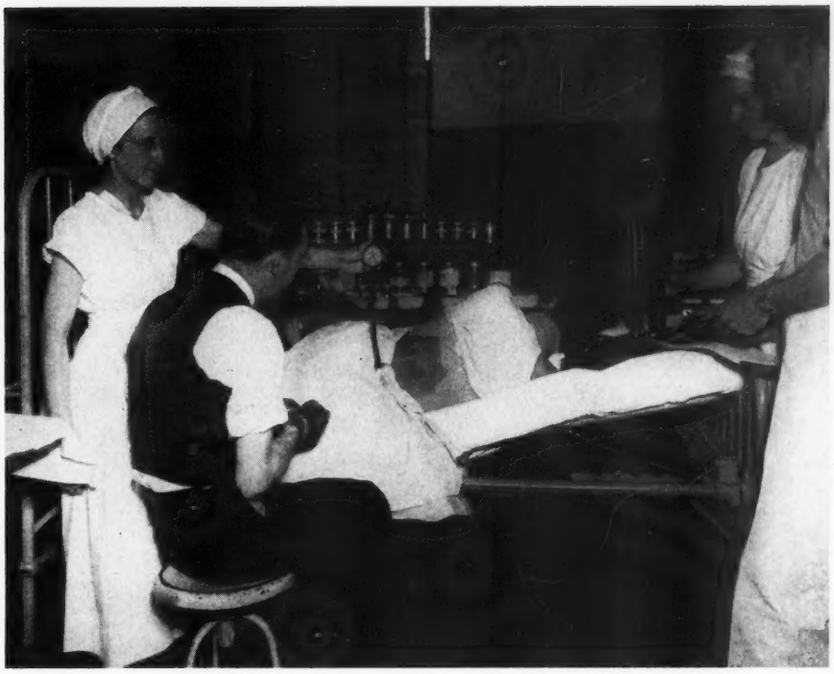


Fig. 4 — Queckenstedt's test with aneroid manometer and blood pressure cuff.

apparatus was designed by the department of physiology and is simple, adequate and foolproof.

Ventriculography is an essential part of neurosurgical work. This is done in a special room provided for that purpose by the department of roentgenography. The openings in the bone are made and closed in the operating room. The patient is on a light table (Fig. 3) that has special parts attached. The table is on large wheels so that the patient can be moved to the near-by x-ray room with little difficulty. It would be ideal to have such a room next to the operating room but this is possible only in a hospital devoted exclusively to the care of neurosurgical cases.

All wounds are dressed with silver foil and crinoline is applied over the dressing. As soon as the patient is returned from the operating room a blower is ready to dry this rapidly. Each ward has several blowers.

For the further smooth running of the operating room, two graduate nurses are provided; one handles the dressings and the other, the instruments. An instrument nurse can be dispensed with if the intern remains long enough on one service to familiarize himself thoroughly with the duties.

In recent years surgeons have come to realize that the water a patient loses in the course of an operation must be compensated for. This becomes particularly important when the operations are very long as they frequently are in neurological surgery. In hot climates this becomes still more serious. To counteract this, intravenous glucose and saline solutions are given during the operation and, in addition, the neurosurgical operating room is air-cooled by a special unit.

Every neurosurgical case, particularly brain tumor cases, must be watched with particular care after operation. In the wards this is taken care of by putting the patient into a small unit where one nurse is on duty. All patients in rooms, however, must have special nurses. If a patient cannot afford special nurses, he is not allowed to occupy a room. This introduces a serious economic problem. Many patients can afford to pay for a moderately priced room but special nurses are prohibitive. To cover such cases the administration of Barnes Hospital permits neurosurgical cases to be put into the ward as "private patients on the ward." Such a procedure requires close cooperation between the surgeons and the administration for patients might readily take advantage of such a situation. The administration has left

List of Supplies on Dressing Cart

Bottles
- 120 cc. iodine
- 120 cc. collodion
- 120 cc. balsam of Peru
- 500 cc. ether
- 500 cc. alcohol, 60 per cent
- 500 cc. benzene
- 500 cc. flask sterile water
- 500 cc. flask sterile boric acid
- 500 cc. compound solution of cresol
- 500 cc. peroxide
- 1 flask novocain, ½ per cent
- Silver nitrate sticks

Jars, large
- 1 jar fluffs
- Applicators
- Tongue depressors
- Cotton balls
- Alcohol sponges
- Flats
- Dakin tubes
- Medicine glasses and droppers
- 20 sponges
- Handling forceps

Jars, small
- Boric sponges
- Rubber tissue
- Sterile safety pins
- Suture silk
- French needles
- Vaseline
- Xeroform ointment
- Boric ointment
- Zinc oxide ointment
- Scarlet red
- Lassar's paste

Catheter Pans, small
- Xeroform gauze
- Vaseline gauze
- Scarlet red gauze
- Assorted gauze drains, ⅛, ¼, ½ and 1 inch

Instrument Pan
- 4 scissors, straight and curved
- 3 blunt scissors
- 9 thumb forceps without teeth
- 1 thumb forceps with teeth
- 1 paracentesis knife
- 2 probes
- 12 Kelly clamps
- 1 needle holder
- 6 hemostats, small
- 6 mosquito clamps
- 1 scalpel, No. 3
- 2 needles, air injection, medium size
- 2 needles, ventricle
- 4 needles, lumbar puncture

Sterile Supplies
- 4 empyema pads
- 6 pkg. sterile towels
- 2 breast rolls
- 6 gauze rolls
- 2 doz. Sachs' flats
- 6 pkg. Sachs' silver foil
- 3 doz. abdominal pads
- 2 sets fluffs or pads
- 4 pr. sterile gloves, No. 8
- 1 doz. sterile test tubes
- 1 doz. sterile culture tubes
- 1 doz. sterile Wassermann tubes
- 1 can talcum powder
- 3 small basins, 5 inch diameter
- 4 pr. sterile gloves, No. 7½

Unsterile Supplies
- Dressing rubber, 18 by 18 inches
- Assorted gauze bandages in large jar
- 6 crinoline bandages, 6 inch
- 1 roll adhesive bandages
- 4 Sachs' caps (2 cerebral, 2 cerebellar)
- 2 sandbags
- 1 small pin basin
- 1 pr. bandage scissors
- Razor with blades
- Safety pins in basin
- 1 dressing basin

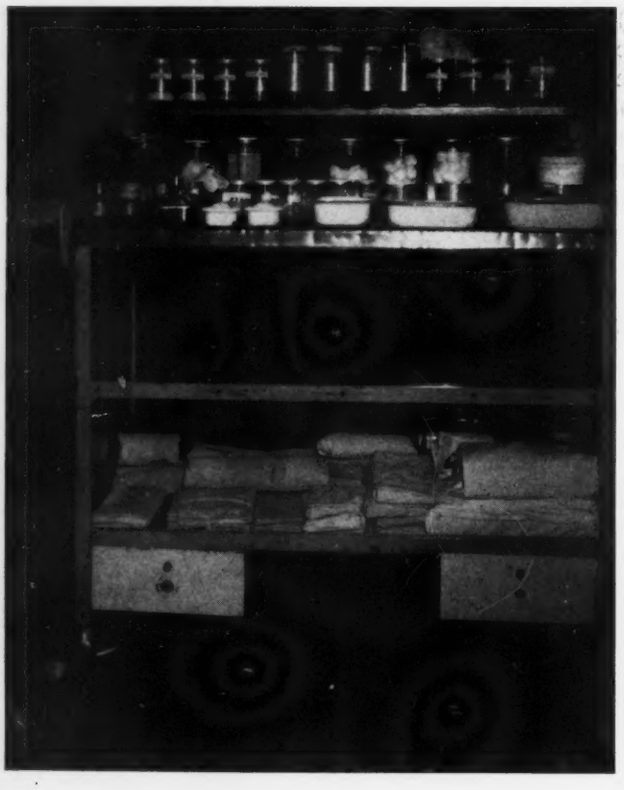


Fig. 5—A dressing cart especially designed for Barnes Hospital. It contains all the dressings and instruments that would be required in any neurosurgical procedure. See accompanying list.

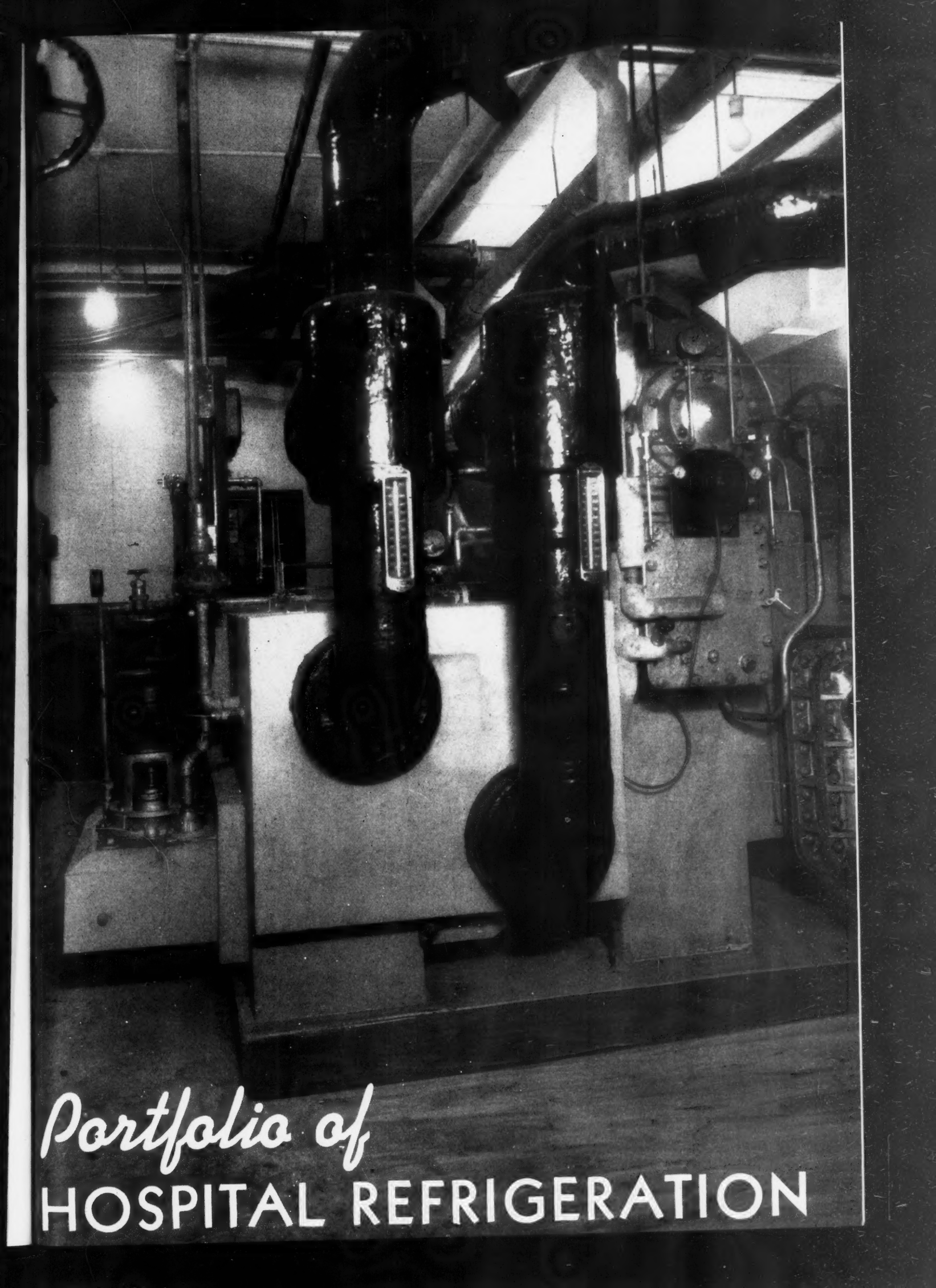
it to the neurosurgeon to designate which cases should fall into this category.

The dressing of a neurosurgical case requires special equipment. Since neurosurgical cases are scattered through all the surgical wards (this is desirable for teaching and nursing), each ward would have to have the special equipment. This would be expensive. At Barnes Hospital this problem has been solved in an eminently satisfactory way. A special dressing cart was built (Fig. 5) that is large enough to contain all the dressings and instruments required for any neurosurgical procedure. This cart is taken care of by the instrument nurse in the operating room and she brings the cart, which is on large rubber wheels and can be readily moved, to any ward where a dressing is to be done, thus saving a good deal of time and effort.

The primary purpose of a hospital is the care of the sick. Training young men and women in the care of the sick is equally important and this can be done properly only in a hospital.

The time was when neurosurgical conditions were considered so rare that the doctor did not need to know about them. Today the situation is quite different and it devolves on all teachers of neurosurgery to see that their students are familiar with them. This can only be done in a general hospital, since medical students cannot go or be sent to special institutions. Furthermore, these special institutions are so few that they could not possibly take care of the needs of the medical students.

It is a well known fact, familiar to all teachers of medicine, that patients receive better care if they are used for teaching purposes. To carry out such a plan it is essential that the hospital provide adequate space in which to gather small groups of students so that they may study the patients and observe them. At Barnes Hospital such a room is provided in the surgical pavilion. Patients that are being discussed are brought to this room. By bringing the bedside to the students, the routine work of the ward can go on undisturbed. Moreover, a patient's condition is not discussed in the presence of other patients, an excellent rule.



Portfolio of
HOSPITAL REFRIGERATION

Essentials for Proper

A. J. HOCKETT, M.D.

THE refrigerating problems involved in an institution as complex as a hospital are many and varied. Most hospital administrators, while having a passing knowledge of the basic problems, have not had, by virtue of training, any special means by which they are able to attack such problems. It is, therefore, incumbent upon the administrator of a hospital and the board of trustees to arrange some working basis with a consulting engineer, preferably as a member of the board, so that advice and help can be given.

In this paper, an attempt has been made to gather together all of the refrigerating problems which arise from time to time within the hospital and to present a brief review of the underlying principles.

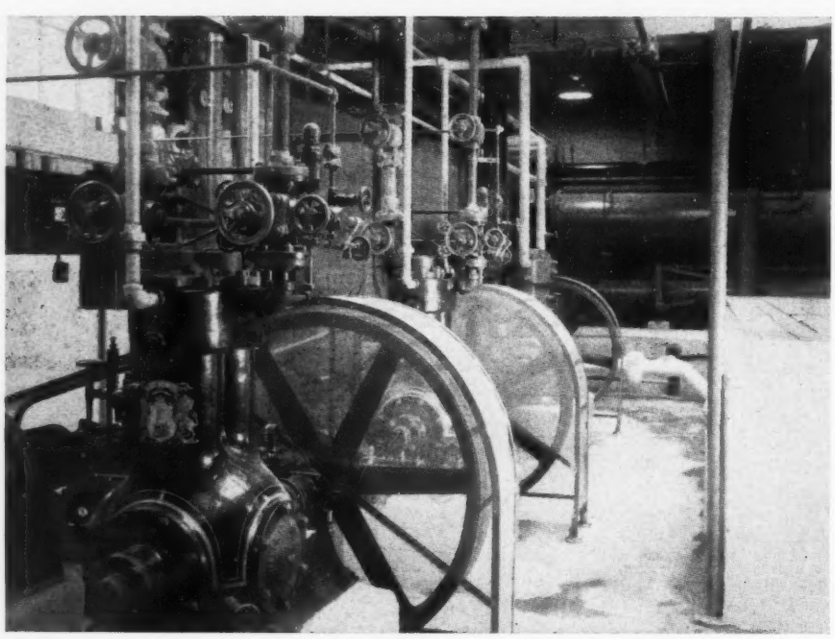
Power Plant

In connection with the power plant, most modern hospitals operate a central icemaking plant, which is an admitted economy. In the planning of our hospitals, too often little attention has been paid to the needs of the hospital in relation to the plant power and daily output. One reason for this is the fact that no comprehensive survey covering various geographic sections of the country as to the amount of ice needed in relation to bed capacity has ever been made available to architects and administrators for their guidance when planning new hospitals. In the southern areas, a rather cursory survey has shown that the ideal capacity for such a plant, in order to take care of peak loads occurring during the summer months, should amount to approximately 25 pounds per day per bed, the bed ratio being determined on the basis of occupancy rather than on bed capacity.

By far the greatest portion of this ice is used as cracked ice in the diet kitchens on the various floors; hence, methods of manufacturing, distribution and storage of cracked ice should receive careful consideration. Any of the commercial ice crackers are usually acceptable.

The trucks for transporting ice to the floors should be well insulated, especially on the bottom, in order to lessen evaporation and to prevent damage to floor wax from condensation during delivery. The ice containers on each floor should be heavily insulated, should always be kept closed and, for sanitary and practical purposes, should have stainless metal liners. The capacity of these containers should be large enough to provide at least twelve hours' supply for each floor, and for this purpose we have found it necessary to provide containers with a 75 pound capacity for the average ward of from 35 to 45 patients.

Refrigerating engineers report a tendency to replace common brine systems of refrigeration with various types of direct expansion equipment wherever it is necessary to transport the refrigerant used for any considerable distance. A New Orleans commercial institution, following a refrigerating engineer's study, has recently replaced its brine system, which was equipped with a 150 H.P. compressor, by equipment delivering only 60 H.P. but using the direct expansion principle.



Engineers report a trend toward direct expansion types of equipment.

Main Kitchen

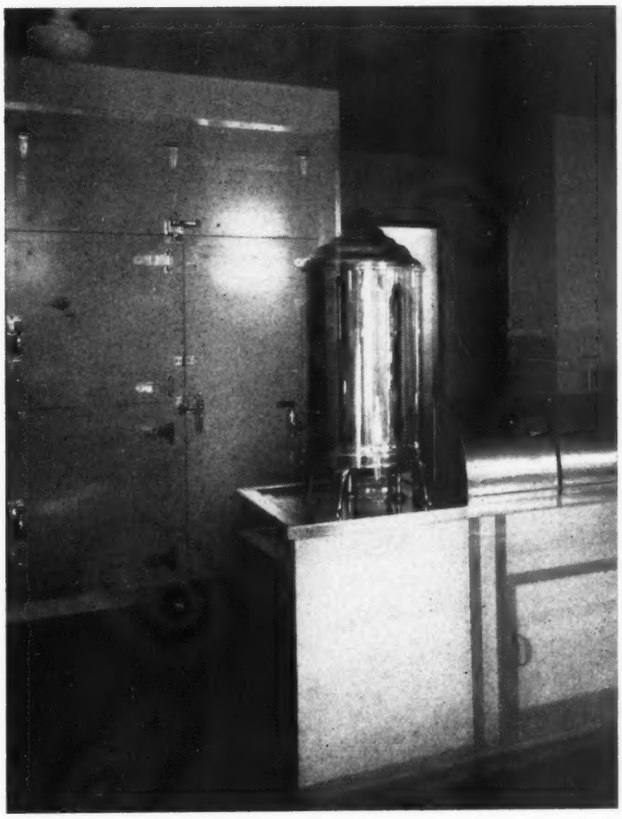
The hospital's heaviest investment in refrigerating equipment is usually found in the main kitchen. The problem of bulk storage of food is one that merits the serious consideration of every hospital architect and administrator. The bulk storage walk-in box should be divided into at least four compartments, comprising a vegetable room, a meat room, a milk room and an outer compartment affording access or traffic-way.

Before proceeding to figures as to the average mean temperature desired in each room and, therefore, the refrigerating capacity of the equipment, the table on page 68 should be carefully studied.

On the basis of this table, accurate temperatures can be worked out according to the type of food to be stored in each room, although arbitrarily average temperatures for meat

Refrigeration

Superintendent, Touro Infirmary
New Orleans



Right: Refrigerator in main kitchen of King's Daughters' Hospital in Frankfort, Ky. Below: General storage refrigerator divided into compartments for dairy products, meats, fruits and vegetables and miscellaneous dietary supplies.

rooms are usually set at 35°F. and for milk and vegetable rooms, at 45°F. One of the most troublesome problems will be found in connection with the meat room where it is possible to prevent dehydration and darkening of meats only by studied analysis of equipment and by careful planning in advance.

Unless a proper ratio between the temperature of the room and the temperature of the refrigerant is maintained, dehydration almost inevitably results. The actual temperature of the refrigerant should be as close to the room temperature as possible and a spread of not more than 10°F. between these two temperatures should be insisted upon.

A refrigerant temperature of 25°F. and a storage temperature of 35°F. are found to be most effective in keeping dehydration and consequent waste at a minimum. Experimentally, we have installed in the meat boxes at Touro Infirmary a well known commercial type of ultraviolet irradiation for the purpose of destroying air-borne bacteria.

Two of the commonest omissions in hospitals are: (1) a well built and adequate walk-in system of boxes and (2) boxes for current use storage. As a result, large walk-in boxes are in constant use during the day, and the doors are almost never closed. This brings about a condition in which satisfactory temperatures are not maintained, spoilage results and large amounts of food are often lost, in addition to the fact that it is impossible under such a system to make quantity purchases.

The adequate provision of auxiliary reach-in boxes provides a solution to this problem. A capacity of one-half cubic foot per average occupied bed is a satisfactory capacity for most institutions. Without such auxiliary boxes, cooks and other employes are required to obtain all of the foods from the storage rooms and unusual service and human loads come to be injected into these rooms. Frequent trips into these rooms on the part of a large number of people are necessary, and this permits a large quantity of moisture-laden warm air to enter. Since the coils are required to work at low suction temperatures to absorb the heat, there is always a tendency to frost the coils. This results in decreased efficiency.

The provision of accessory boxes

Temperature Tables for Food Storage

Vegetables[1]

Commodity	Temp. in Degrees F.	Storage Period in Days
Asparagus	32	21-28
Beans:		
Green or snap	32-40	21-28
Lima	32-40	21-28
Wax	32-40	21-28
Beets		
Topped	32	30-90
Bunch	32	7 to 10
Broccoli	32	10
Cabbage	32	90-120
Carrots:		
Topped	32	60-120
Bunch	32	7 to 10
Cauliflower	32	14-21
Celery	31-32	60-120
Corn		
(green)	31-32	variable
Cucumbers	45-50	6 to 8
Eggplants	45-50	10
Endive	32	14-21
Garlic (cured)	32	180-240
Horseradish	32	120-180
Jerusalem artichokes	31-32	60-150
Leeks		
(green)	32	30-90
Lettuce	32	14-21
Melons:		
Watermelon	36-40	14-21
Muskmelon	32-34	7 to 10
Honey Dew and Honey Ball	36-38	14
Casaba and Persian	36-40	28-42
Mushrooms	32-35	2 to 3
Onions and onion sets	32	150-180
Parsnips	32	60-120
Peas		
(green)	32	7-21
Peppers:		
Chili (dry)	variable	180-270
Sweet	32	28-42
Potatoes	36-50	variable
Pumpkins	50-55	60-180
Radishes (winter)	32	60-120
Rhubarb	32	14-21
Rutabagas	32	60-120
Salsify	32	60-120
Spinach	32	7 to 10
Squash (winter)	50-55	60-180
Sweet potatoes	50-55	120-180
Tomatoes:		
Ripe	40-50	7 to 10
Mature green	55-70	7-42
Turnips	32	60-120

[1]U. S. Department of Agriculture.
[2]Year Book and Buyer's Directory, 1938-39.

Fruits and Nuts[1]

Commodity	Temp. in Degrees F.	Storage Period in Days
Apples	31-32	variable
Apricots	30-32	10
Avocados	40-55	variable
Bananas	variable	variable
Blackberries	31-32	7-10
Cherries	31-32	10-14
Coconuts	32-35	30-60
Cranberries	36-40	30-120
Dates	variable	variable
Dewberries	31-32	7-10
Grapefruit	variable	42-56
Grapes:		
Vinifera	31-32	120-180
American	31-32	21-28
Lemons	55-58	28-120
Limes	45-48	42-56
Logan blackberries	31-32	2 to 5
Olives (fresh)	45-50	28-42
Oranges	variable	56-70
Peaches	31-32	14-28
Pears	29-31	variable
Pineapples:		
Mature green	50-60	21-28
Ripe	40-45	14-28
Plums		
(prunes)	31-32	7-14
Quinces	31-32	90-120
Raspberries	31-32	7 to 10
Strawberries	31-32	7 to 10
Dried fruits	32-50	365-730
Frozen fruits	variable	180-365
Nuts	32-50	240-365

Meats[2]

Commodity	Temp. in Degrees F.
Brined	38
Beef (fresh)	33
Beef (fat or lean)	30
Beef (dried)	36-40
Hams, ribs, shoulders (not brined), sausage casings	20
Lard	38
Livers	20-30
Lamb	32
Pork (edible portion)	29-32
Pork (fat)	30-35
Tenderloins, butts, etc.	33
Veal	32-33

Fish[2]

Fresh fish	20-28
Dried fish	36
Oysters in shell	30-40
Oysters in tubs	25-35

Canned Goods[2]

Fruits, meats, sardines	35-40

Dairy Products[2]

Butter	18-20
Cheese	34
Eggs	31
Milk	35

Miscellaneous[2]

Furs, woolens, etc.	35
Flour, meal (wheat)	35-40
Honey	36-40
Maple syrup, maple sugar	40-45
Poultry (dressed iced)	28-30
Poultry (dry picked)	26-28
Poultry (scalded)	20
Game and poultry (frozen)	15-28
Nuts (dried)	35-40

Box in the main kitchen at the University of Iowa Hospitals, Iowa City.

allows the chef to requisition anticipated food requirements from the main storage space each morning. These foods are placed in the service refrigerators and the boxes are then closed for the day, except in cases of emergency. This provides a single responsibility for the main storage rooms and, more important, single responsibility for seeing that the main storage compartments are kept closed. The additional refrigerating capacity required for the operation of service refrigerators is compensated for by the decrease in load on the walk-in boxes.

The main kitchen should be further equipped with one of the standard ice cream manufacturing plants now on the market. Most hospitals manufacture their own ice cream or ice cream mix and major economies are brought about through this method.

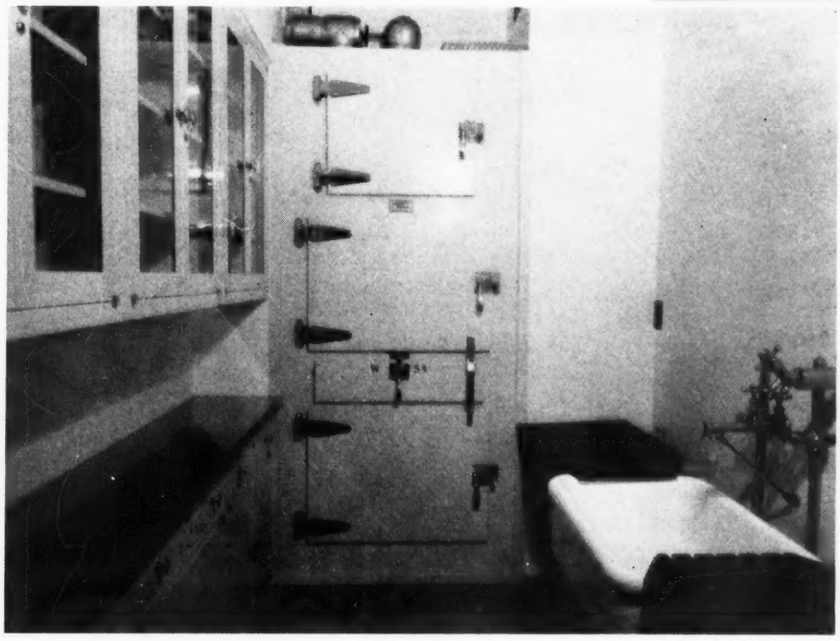
During the last two years, there has been a great increase in the amount of fresh frozen foods being served to patients because these foods are available during all seasons. Their reception by patients on the bases of palatability and flexibility in special diets has more than compensated for the slightly greater cost, which we have found (here in New Orleans) to amount to between 10 and 15 per cent. It would be wise, therefore, to provide a suitable storage compartment for the preservation of these foods when modernization programs are contemplated. In order to make quantity purchases of frozen foods, it is necessary to install commercial equipment which will maintain quantities of frozen fruits or vegetables at a temperature between 10°F. and 15°F.

Fish and Seafood

When large quantities of fish and seafood are consumed, it may be desirable to provide special storage facilities for this purpose. Bulk seafood is usually stored in large insulated bins and is covered with ice. The bin tops are hinged and counterweighted. Space is provided for a refrigerator coil on the rear wall, back of fish tanks, to retard ice meltage.

Cut-up fish and other seafood may be stored in a refrigerator with a series of metal trays that slide out when the door is open. Each pan should operate easily on roller bearing runways so constructed that the pan will remain in a horizontal position until entirely withdrawn from the refrigerator. Pans should also be protected by shields so that drippings from the pans above are discharged without coming in contact with the pans beneath.

Right: Type of box in milk formula room, Children's Preventorium of Hamilton County Sanatorium near Cincinnati, Ohio.

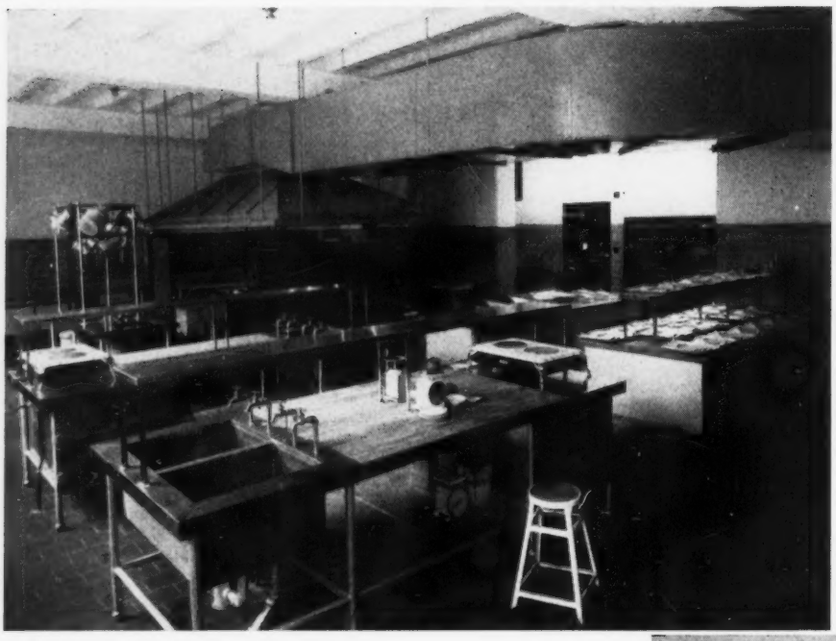


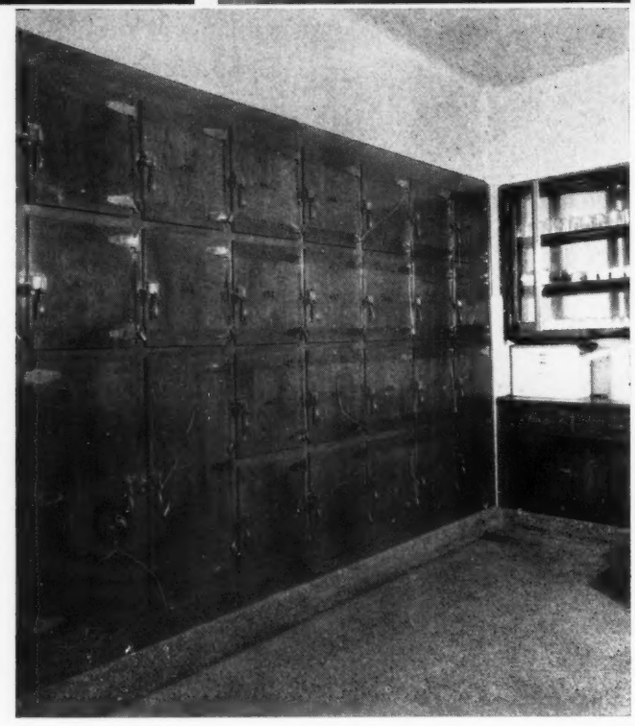
Pantry ice box in use on each ward at University of Iowa Hospitals.

Diet Kitchen

The principal refrigeration problem in diet kitchens has to do with the purchase of individual units of the direct expansion type. High pressure salesmanship in this field makes it difficult for the hospital administrator to set down any hard and fast rules as to the type of ice boxes to be used. The following points should be kept in mind and specific information should be obtained when considering this problem:

In the southern area, where temperatures of 95°F. are common, it





Above, left: Main diet kitchen box at University Hospitals, Iowa City. Above, right: Box used for biochemistry. Right: Storage box for food brought in for private patients at Columbia-Presbyterian, New York.

should be specified that the box temperature be maintained at an average of 35°F. when the outside temperature is as high as 95°F. A study should be made of the actual number of hours the motor runs out of each twenty-four hours at a temperature of 95°F. for each type of box. The type of refrigerant used should be determined and boxes using refrigerants of known toxic qualities should be eliminated. The actual amount of coil surface in the box should be determined, as the degree of dehydration will vary in inverse proportion to the amount of coil surface.

Laboratories and Pharmacies

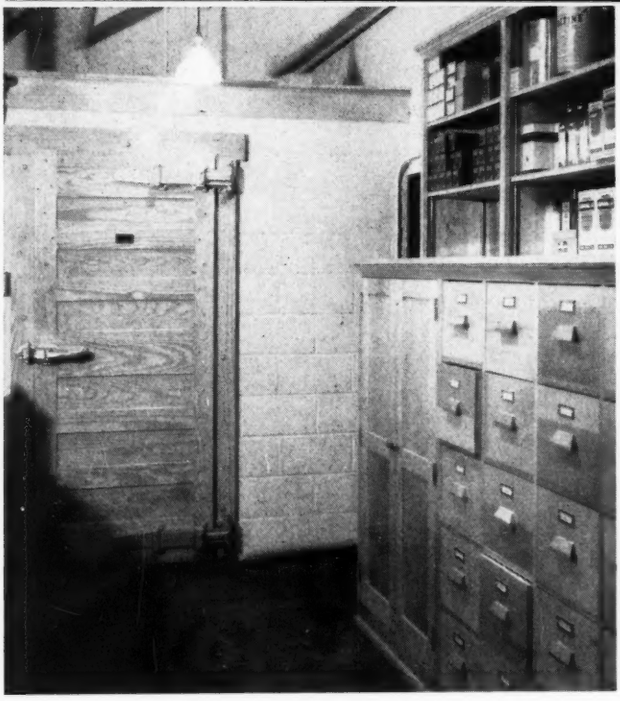
Storage problems arise both in the laboratories and in the pharmacy. Excellent examples of direct expansion refrigerating units have been developed by several commercial organizations for use in these departments and are the result of much study. They can be purchased with confidence and are well adapted to the purposes for which they are built.

Drinking Water

A careful study of the proper temperature for drinking water has developed a standard temperature of 50°F. as being most tasteful and most desirable from the standpoint of health. Electrically refrigerated fountains are especially important in the South, where average water temperatures run as high as 88°F. during the summer months. The provision of an abundant supply of drinking water at the proper temperature is important because, when available, the matter of satisfying thirst becomes a pleasure and greater quantities of water are consumed by employes. It is admitted that this practice has a tendency to promote health and such provision thus becomes a worth-while investment for any type of institution.

Physical Therapy

Many of our more modern physical therapy departments provide for hot and cold contrast full body baths. These require plumbing connections so that any desired temperature of hot water may be delivered to the tank to be immediately followed by cold water refrigerated to a temperature of 40 degrees.



Above: Mortuary refrigerator having a removable tray and telescopic carriage with cooling coils between each tray. Left: Entrance to a drug room box.

Waste Product Refrigeration

If garbage is stored for any period of time, it is desirable to have it refrigerated to prevent decomposition and thus reduce the nuisance of flies and odors. The refrigerated room for such waste products should be readily accessible to the kitchen and diet kitchen. It should also be close to a rear driveway so that the products can be removed quickly and inconspicuously.

The waste products room is usually constructed on the same general principle as a walk-in refrigerator for food storage. It may be cooled by a local unit or may use circulating brine. Walls and floors should be smooth and waterproof and there should be a sewer outlet to allow frequent flushing with a hose. If garbage is stored in cans, provision of a steam outlet for use in cleaning the cans is often desirable. This may be installed just outside the waste products storage room or in any other convenient location.

Hospital air conditioning in its most recent aspects will be the subject of a special portfolio to be presented in July

Morgue

Another problem is that of body storage in the morgue. Depending somewhat upon the locality, it is usually found necessary to provide an average of one box per each 75 patients. The temperature maintained should be 38°F. and there should be separate provision for the preservation of tissues at a somewhat lower temperature, if it is practical.

The interior of the mortuary box should be completely tiled, in order that it may be thoroughly cleaned whenever necessary. At least in the southern states, it is important that this box be treated as precaution against termites, especially when it is located on the first floor. All trays and racks should be mounted on ball bearings and so constructed that they are easily cleaned.

• • •

In conclusion, it might be emphasized that the problems of hospital refrigeration present tremendous possibilities for savings and merit the consideration of every responsible administrator from this particular standpoint alone.

Properties of Refrigerants

REFRIGERANTS have distinctive characteristics. The accompanying table shows the efficiencies of each of the leading refrigerants, according to a recent analysis. Group 1 consists of the refrigerants most suitable for reciprocating compression and group 2, those best adapted to centrifugal compression.

The analysis is based on the Carnot cycle, which is the same for all refrigerants. The theoretical coefficient of performance for a temperature range of from 5° F. to 86° F., according to the Carnot cycle, is 5.74. The coefficient of performance of other refrigerants is based on the theoretical power input for the respective cycles. The last column, "per cent efficiency," is the theoretical efficiency of the cycle compared with the Carnot cycle.

Carbon dioxide, in the quantities ordinarily used in refrigeration, is a harmless refrigerant and so may be installed in the hospital building with no extra precautions for ventilation. It furnishes an adequate means of refrigeration but has one great disadvantage: since it is colorless and odorless a leak gives no warning and the whole charge may be lost before a lack of refrigeration indicates its presence. This may involve considerable expense.

Ammonia, on the contrary, is a refrigerant having a strong odor. Since this refrigerant is toxic, an ammonia plant should not be installed in the main building unless it is cut off in such a way that fumes cannot reach corridors and patients' rooms. A slight leak may cause discomfort to a number of people and an extensive break may be serious in the effect produced by the escaping refrigerant. Even when installed in or adjoining the boiler house or in a separate building, gas masks should be quickly available and free ventilation should be provided. On the other hand, because of its warning odor, serious leaks rarely occur. This fact, added to the low cost of the gas, results in economical maintenance.

Sulphur dioxide is colorless in either liquid or vapor form. Its vapor has a pungent sulphur odor. It is nonexplosive and noninflammable under all conditions and its condensing point is comparatively low. It is a stable refrigerant and will not break down under ordinary conditions or affect lubricating oils in its original dry state. Sulphur dioxide may be considered noninjurious to health for all practical purposes, but care should be taken in exposing persons, animals or plants to the vapor. The odor of sulphur dioxide is a warning.

Freon, or F-12, is nontoxic, nonirritating and noninflammable. It has a comparatively low latent heat value so that more Freon has to be circulated to produce the amount of refrigeration that sulphur dioxide produces. Freon is slightly soluble in water, but the solution formed will not corrode any of the metals commonly used in a refrigeration system. Moisture should be kept out of the system as there is danger of ice forming at the throttle valve, restricting or stopping the flow of liquid into the evaporator. Leaks may be detected with a gas leak detector, for the Freon will cause the flame to burn blue green.

Thermodynamic Characteristics of Various Refrigerants

Comparison of Cycles Using Various Refrigerants Producing 1 Ton of Refrigeration Through a Temperature Range of From 5° F. to 86° F.

Cycle	*Weight Lbs. per Min.*	*Volume Cu. Ft. per Min.*	*Absolute Pressure Initial Pressure at 5° F.*[1]	*Absolute Pressure Final Pressure at 86° F.*[2]	*Ratio of Compr.*	*Coefficient of Performance*	*H. P.*	*% Efficiency*	*Remarks*
Carnot	.....	.....	.....	.....	.....	5.74	.8214	100	
			GROUP 1						
Ammonia	.4212	3.44	34.28 Lbs.	169.2 Lbs.	4.93	4.85	.973	84.5	
Propane	1.396	3.35	43.70 "	159 "	3.64	4.88	.9668	85	
Carbon Dioxide	3.74	.999	339. "	1054 "	3.11	2.56	1.843	44.6	
Carbon Dioxide	2.091 4.081[3]	.559	339. "	1054 "	3.11	3.81	1.238	66.4	(3-stage liquid cooling)
Carbon Dioxide	2.625	.702	339. "	1054 "	3.11	3.65	1.294	63.6	(liquid sub-cooled to 70° F.)
Sulphur Dioxide	1.388	9.24	11.81 "	66.6 "	5.63	4.735	.995	82.5	
Methyl Chloride	1.33	6.185	21. "	95.5 "	4.55	4.84	.975	84.2	
Dichlorodifluoromethane	3.92	5.82	26.5 "	107.9 "	4.065	4.61	1.025	80.2	Freon 12
			GROUP 2						
Dichloroethylene	1.768	108.4	1.78 Ins.	14.65 Ins.	8.23	5.14	.918	89.4	
Trichloroethylene	2.137	513	.315 "	3.42 "	10.84	5.085	.928	88.5	
Dichloromethane	1.485	74.	2.39 "	20.48 "	8.56	4.9	.965	85.3	Carrene No. 1
Monofluorotrichloromethane	3.05	37.2	6.07 "	18.3 Lbs.	6.13	4.815	.980	83.8	Carrene No. 2
Water	.1996	1972	.0569 "	1.248 Ins.	21.9	4.1	1.15	71.5	

[1] Pressure below atmospheric stated in inches of mercury.
[2] Pressure above atmospheric stated in pounds per square inch.
[3] Weight in condenser.

Credit Office Problems

JOSEPH C. DOANE, M.D.

A credit officer needs some social service training but the two activities should never be combined. Photograph from Morton Hospital, Taunton, Mass.

ONE of the most important functions of the administrative branch of the hospital is the establishment of a credit system that will enable patients to pay their hospital bills so that the burden will not be too great, either on the patient or on the institution. This duty should be put into the hands of a person who is well equipped, both by temperament and training, for the task of adjusting the expense of hospital treatment to the patient's income.

Many look upon this type of work as synonymous with social service. No greater error could be made. A medical social worker who endeavors to perform credit work jeopardizes her possibilities for good in both types of work. If a credit officer undertakes to combine financial investigations with the solution of medical social problems he is likely to perform a poor job.

It is a belief widely held that the credit officer should decide on every request for an adjustment on any item of the hospital rate card. For example, in some institutions, the credit officer is required to approve a reduction in an x-ray, physiotherapy, laboratory or dispensary fee. Whether or not the credit officer himself makes all such decisions, somebody must weigh the ability of the patient to pay a routine fee and must approve such requests. No one can become an efficient credit officer unless he is a practical psychologist, inasmuch as the most important factor is the ability to understand human beings. From an idealistic standpoint, the attitude of the credit officer should be a judicial one in which the patient's rights as well as those of the hospital are respectfully considered.

A good credit officer should have some social service training and should be able at all times to eliminate personalities from his activities and decisions. To begin basically as a friend of the patient is a sound plan. Harshness, sarcasm and unreasoning partisanship in favor of the hospital are not workable traits. Firmness with fairness is essential. In fine, a socially trained, mature, fair man or woman with a business head will succeed where a pleasant, immature person or an uneducated, untrained, bulldozing man will fail. Not only money but prestige and friends may be made for the hospital in the credit office and here also these priceless commodities may be lost through tactlessness.

The credit office should be conveniently located adjacent to the entrance to the hospital. In large institutions the credit officer's assistants may have their desks in such places as the out-patient department or the receiving ward. The credit officer should be responsible to the superintendent, assistant superintendent or head bookkeeper rather than to the social service director. He is, therefore, attached to the business side, not the medical department of the hospital.

A difficult, if not an actually impossible, accomplishment is to discover standards or yardsticks by which one may decide the economic classification of any given patient. Ownership of an automobile, manner of dress, general protestations of poverty and even a definite knowledge of weekly income are not wholly efficient standards by which to make this decision. There are some who have endeavored to lay down hard and fast rules as to whether the patient shall be admitted to a ward on a full-pay basis, shall be required to take a private or semi-private room or, if classified as a ward patient, shall be admitted as a part-pay or free case. Living is so complex for most persons that to endeavor to standardize human lives is the sheerest folly.

It has been hinted that it is as important to prevent patients who are able to pay for a private room from going into a ward as it is to require ward patients to pay a fair rate for their care. Certainly, the credit officer should not too greatly applaud his own ability because a large number of ward patients are admitted on a full-pay basis, if among them there is one or more

who should not be permitted to enter the ward at all.

It may be said that in a measure the ability of the credit officer can be gauged by the number of unpaid or uncollectible bills for hospital care that remain at the end of the month. It is far more businesslike to decide at the start that a patient shall be treated free than to rate him as a full-pay patient and find that this decision has been incorrect. In some instances, of course, patients will promise to pay full rates for ward service, will do so for one week and then will proclaim their inability to continue longer on this basis. A re-rating of such a patient should be made if a careful investigation seems to justify this action.

The urgency of the need for hospital care is a factor that enters into the credit officer's decision. It is not for him to decide that a hernia can wait until money is raised to pay for ward care nor should he permit himself to be placed in the position of deciding on any but the financial angle of the patient's problem. It is a good plan from the patient's standpoint to give a medical examination to all those whose entrance into the hospital must be indefinitely delayed. The final decision as to medical needs should rest with some medically trained person.

Detecting the Imposter

There are many reasons why patients come to the hospital seeking a reduction in rates. Often patients who in more prosperous times have been able to employ private physicians and occupy private and semi-private hospital beds find themselves unable to do either. The credit officer, if he is tactful, will quickly sense the embarrassment of those who at once tell him that this is an unusual experience for them. The patient who announces, in effect at least, that the world owes him a living should be well investigated. If one were to spend an hour at the elbow of the credit officer he would hear again and again the familiar story of loss of work, of an incurred debt or of dependence on friends or a relief agency. On the other hand, there is a vicious habit that has been generated in the past decade of deliberately refraining from work and of needlessly going "on relief." When such persons are detected, they should be promptly referred to a city or county hospital. Many voluntary hospitals that do not receive state or community aid pile up deficits unnecessarily because of inefficient credit machinery or because of an emotional, unstable attitude that prompts them to accept everyone who applies.

This businesslike attitude need not be construed as one that recommends the examination of the pocket book before the appendix. Nevertheless, hospitals because of their charitable traditions should not permit themselves to be taken advantage of. In the case of the sudden illness of the head of the family, most physicians will not refuse treatment no matter how improbable is the later receipt of a fee.

Zoning of Hospital Services

Many patients come to the hospital for aid because they owe a physician a large bill and will not increase it, or because it has been their custom to pay for each visit and now this cannot be done. Sometimes they are ashamed to ask for a reduction from the physician but this feeling does not prevent them from doing the same from the hospital. Often a hospital errs in not referring a patient to a physician even though but a minimum fee can be paid. The self-respect of the patient is thus saved and many a physician would prefer to have a small fee rather than none at all.

Decisions by the credit officer as to the admission of free ward patients are sometimes affected by the presence or absence of the city zoning of hospital service. It is not fair because one hospital has adopted a generous policy in the acceptance of free patients for that institution to be expected to treat all patients needing help. Zoning of hospital services is a splendid plan provided all institutions in a community practice it.

Most credit officers will not accept chronic cases for free service without some definite instructions from a medical officer. During the depression it was a common experience for men or women who had lost their positions to decide to have some long-delayed elective operation performed since, being without work, they would lose nothing by their stay in the hospital. This is a curious psychology on the part of the patient and one which would be even more harmful should the hospital permit itself to be thus imposed upon.

Physicians often make snap credit decisions when they observe that a patient comes to the dispensary in an automobile, wears a presentable coat or in some other way suggests a degree of prosperity. A trained social worker or credit officer is less easily deluded. Illness in the family, unemployment, debt, dependability on diminishing savings, all may justify a request for hospital reductions. The motor car may be that of an employer, a friend or a relative, or it may be in the course of purchase on the installment plan. Even a wage of as much as $30 a week does not immediately make its recipient ineligible for free ward service. The number of dependents, their state of health, the time the patient has been employed, fixed charges for home purchase and other living expenses may so deplete or even exhaust this wage that the patient actually is in debt at the end of the week. A man earning $30 a week who has ten dependents certainly is a subject for consideration by the hospital credit worker.

Essential Information

A successful credit officer should have available the following information:

1. An estimate of the amount of money available to provide free care.
2. Knowledge of the medical urgency of the patient's condition at the time he is deciding on his economic rating.
3. The opinion of the family physician or a social service verification of the statements made by the patient or his relatives. Good credit work cannot long continue without home investigation.
4. The cooperation of the relatives who are responsible for the patient at the time a credit rating is being made. If relatives are brought to the hospital before the patient is admitted it will be easier to obtain a rating more favorable to the institution than it will be after the patient is under treatment.

Color in the Operating Field

PALUEL J. FLAGG, M.D.

In the fall of 1937, the Society for the Prevention of Asphyxial Death was invited by the medical department of the New York World's Fair to assemble equipment for a model department of pneumatology. This department was to function for the protection of Fair visitors and personnel.

Through the courtesy of leading manufacturers of pneumatologic equipment, what is probably the most complete assembly of its kind ever gathered in one department is now functioning.

An important feature of this department has been an attempt to solve the problem of color in the operating room. Doctor Flagg's article is the result of work in this field extending over a period of fifteen years.

LUXURY in operating room appointments was sharply criticized in an article by Dr. A. T. Bazin in the March 1934 issue of The Modern Hospital. This article stressed the point that "the operating suite is the surgeon's workroom, not the architect's and the engineer's show room," and that "the high cost of medical care is due in no small degree to luxuries in operating room equipment."

While it is not difficult to agree in principle, certain factors referred to invite attention. For example, the cost of medical care as it is related to original construction costs would appear to turn largely upon the time factor. Expensive replacements excluded, an original construction cost giving satisfactory service for a period of from ten to fifteen years would be spread over such a long period that it would become negligible. On the other hand, a literal interpretation of the "surgeon's workroom" might conceivably result in accommodations on a par with those provided for the experimental laboratory or the morgue.

A happy mean may be arrived at by viewing surgery as it functions for the benefit of the patient.

The medical school, accustomed to the objective viewpoint, never fails to stress the difference between experimental animal surgery and human surgery. The difference is by no means limited to technic. It involves all the factors that comprise human relations in their social, legal and religious implications, *e.g.* limitation of procedure, choice of operation and the end to be achieved to meet the specific circumstances of the case. In fact, owing to the pressure of these extramedical obligations, purely technical surgical procedures frequently become secondary. As the extramedical obligation increases with the surgeon's ability and prestige, he reacts physically and psychologically to these factors, becoming sensitive and irritable. Whether he wishes it or not, he will respond to those influences that either trouble or soothe him. As he is annoyed by the running of water and the sound of voices, as he starts and feels the shock if a basin slips to the floor, so he is at peace and the efficiency of his work is increased if his surroundings are congenial, physically restful and in keeping with the significance of his task.

It is all very well to picture the surgeon as a strong silent man with nerves of steel and entirely lacking in emotion. Such men do not exist. Instead the surgeon is an ordinary man. He is worried, is aware of the risk that he deliberately creates and is bending all energies to meet a condition that must be interpreted correctly as he proceeds. For his best work his performance must take place in suitable surroundings, in a setting in which space, light, color, sound and service are in tune with judgment and action.

During the last two decades, certain trends have been discernible in the use of light and color. The operating room was once large, white, and brilliantly illuminated, by daylight when the weather and the hour permitted, by artificial illumination on other occasions.

White is no longer the color of choice in operating room decoration. Daylight illumination is no longer depended upon. The objectionable factor of reflection from intense artificial illumination is becoming generally recognized and is being met in many institutions by the use of gray or other colors in draperies and walls.

Shortly after the appearance of an article that I wrote for the May 1925 issue of *Architectural Record* in which it was suggested that green in the peculiar shade in which it appears as a complement to the color of the blood be employed for walls and operating room draperies, a wave of color passed through industry. Accepting this suggestion as a criterion of surgical cleanliness, restaurants, barber shops and makers of sanitary equipment featured the suggestion. With customary conservatism, the hospital field for which the work had been prepared took only a sporadic interest.

In this article, it was suggested that while daylight is no longer essential in the operating room, there should be a standard quality of arti-

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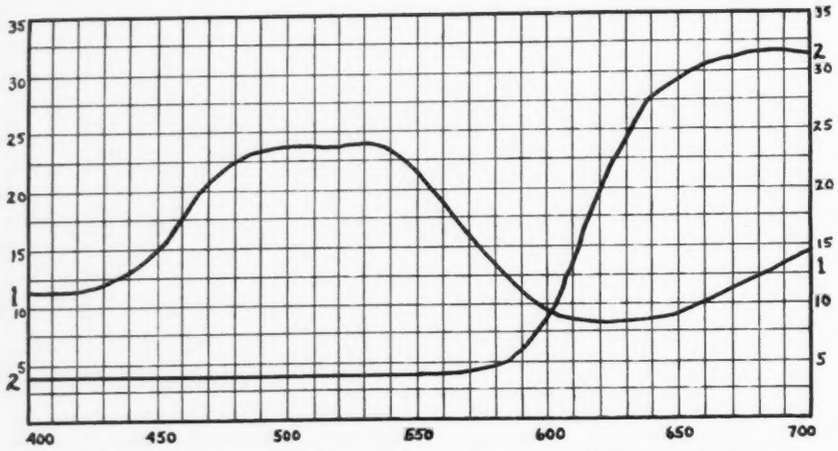

Fig. 1—This graph records the spectroscopic patterns of (1) four thicknesses of green cloth and (2) hemoglobin scale A-1000 backed by black velvet.

ficial illumination. The so-called daylight bulbs, while providing an adequate volume of light, usually were deficient in quality. It was stated that the ideal illumination was that of the daylight spectrum, reflected from the northern sky.

It was further suggested that reflection be controlled by reducing light and by using a lower color value and lower chroma in drapes where brilliant light was necessary for deep work.

What constitutes resistance to the general acceptance and employment of color?

It is my conviction that the following are the principal reasons for the resistance to the widespread use of color in the operating room:

1. Color involves an emotional reaction. This subjective factor in choice complicates decision.

2. The scientific reasons for the use of color are not generally understood.

3. The acceptance of the principles underlying the use of color and the desire to put these into practice are complicated by the fact that there is no commonly accepted designation to cover the correct hue in textile, light, paint, tile and glass that will enable the purchasing department to complete its transaction with precision and simplicity.

Background of Use of Color

What is the scientific background of the use of color? It is believed that a consideration of color involves three generic factors: (a) the object, (b) the illumination, (c) the observer. If any one of these three factors is eliminated, the conclusions will be incomplete.

While these three factors are to be considered in a generic sense as any object anywhere, any illumination anywhere and any observer anywhere, the principle may be restricted in the present instance to a particular object (wound or skin color of the patient's ear), illumination (the illumination under control) and observer (the surgeon and the operating personnel).

The ear is well supplied with blood. The quantity and the quality of its color as this varies with blood pressure and oxygenation may be conveniently observed. The color of this object varies with the quantity of the blood in the capillaries, as measured by the volume of the pulse or by means of the blood pressure apparatus and by the quality of the coloring matter in the red blood cells determined by the amount of oxygen present. Variations in the quality of this color are referred to as varying degrees of cyanosis. (These variations are measurable by the oxyhemoglobinometer.)

In judging the color of the object, therefore, quantity and quality of color are basic considerations. Scientifically speaking, variations in quantity are represented by the same hue but have variations in value and chroma; variations in quality are represented by changes in hue as well as in value and chroma.

If one bears in mind the facts that light is color, that color is reflected light and that the color of the field depends upon the light that falls upon it, it is almost impossible to overemphasize the importance of illumination.

As is the case with the object, correct illumination also turns upon the question of intensity and quality. Intensity of illumination creates the problem of reflection with its special type of ocular fatigue affecting the muscles of accommodation. Quality brings up the question of spectral value and its association with color fatigue which results in reduced visibility of the structures in the field.

The findings of the committee on operating theater lighting of the Canadian Hospital Council summarize the problem of quantity of illumination as follows:

"Adequate illumination of the immediate field of surgical work which the surgeon has in hand: sufficient illumination of surroundings; absence of glare, direct or reflected, and sufficient diffusion to avoid dense shadows."

It is further stated that "since the contrast factor in the immediate field of surgical operation is low, a high intensity of illumination is absolutely essential for the best results . . . but too much stress is placed on the shadowless feature. Shadowless illumination of a field having three dimensions is neither practical nor desirable. It is by virtue of variations of lighting of an object that we gain a knowledge of its contour. The shadows in any field of operation should not, however, be so dense that detail is lacking, the smaller the source of light the denser will be the shadows, but with well-diffused light from a large area, the shadows are soft and transparent and maximum visibility is thereby secured."

Types of Illumination

The committee refers to various types of illuminating methods in general use:

1. Multiple ceiling installation in a single frame, recessed and ventilated.

2. Multiple individual ceiling units.

3. Overhead single light fixtures.

4. Single unit suspension with multiple lights.

5. Simple type in which expense is a factor.

Portable floor lights for spotlight purposes are also recommended. The relative costs of these types of illumination vary from $25 to $300 or more. As to the volume requirements of light, it is stated that an illumination of 640 foot candles at the field of operation, of 175 foot candles at the patient's head and of 16 foot candles

on the instrument shelf is adequate general illumination.

The quality of the illumination turns upon its spectral value. It is generally recognized that since the human eye is accustomed to the spectrum of daylight this spectrum should provide the criterion for the artificial illumination of the operating room. Since the color of an object depends upon the quality of the light that falls upon it, it follows that a light, the spectral value of which is deficient in red and yellow when falling upon the field of operation, will produce a decidedly abnormal effect.

Distortion of the color value of the operative field by deficient illumination is a constant source of anxiety to those who have the lives of patients in their hands.

Fortunately the empirical standards noted above have been recently reduced to a more accurate measuration of the intensity and quality of color necessary for operating room illumination.

It has been stated that the color of an object depends upon the spectral value of the light that illuminates it. Exceptions to this broad principle occur only in those bodies that are in themselves luminous, through heat or fluorescence or through sensitiveness to ultraviolet stimulation.

Heat becomes light when the object heated reaches 500° to 1000° K. As the temperature rises the color changes from red to the white of the noonday sunlight, passing to the blue of the northern sky at 9000° K. Beyond the range of the blue and violet, light passes into the range of the ultraviolet outside of the visible spectrum.

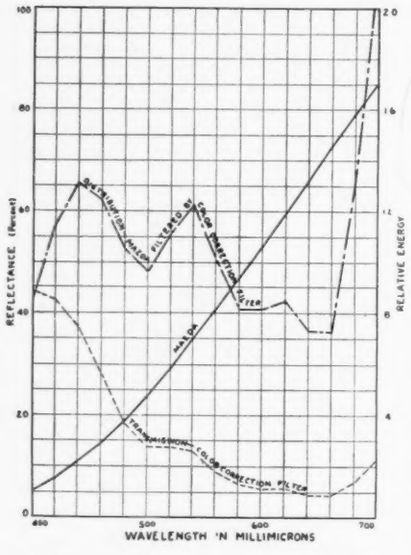

Figure 2 shows the energy distribution curve of artificial light.

For practical purposes and in our present objective we are concerned with light that corresponds to our ordinary daylight. Ordinary daylight, however, has many variations.

Instead of creating the variations that occur by changing the temperature of the radiant filament, this being impossible because the filament is melted at temperatures higher than 3600° K., translucent filters are used which screen out the longer red, orange and yellow waves allowing the blue end of the spectrum to come through as an illuminant. This screening is done at the expense of the intensity of the light which is, in turn, compensated for by an increased wattage in the lamp used.

The problem of matching gradations of light as delicate as those that occur throughout the day was largely empirical until the development of the recording spectrophotometer. This extraordinary instrument accepts a sample of color be it light, textile, tile or any other material, analyzes its spectroscopic pattern and records this pattern as a graph as shown in figure 1.

The ordinary spectroscopic reading, formerly used to value color, is thereby translated into its temperature value and is permanently recorded as a curve, as illustrated in figure 2.

The basic curve for all light and color is on file in the U. S. Bureau of Standards at Washington.

The problem to be met in illuminating the operative field, therefore, is to obtain a light that will give the sharpest contrast between structures within the wound and a correct appraisal of the oxygen content of the blood.

Given an operating field adequately illuminated as to intensity and quality of light, the reaction of the individual surgeon and others who may be gazing into the field of operation or upon the skin of the patient constitutes the final judgment in the determination of color. An intense illumination while revealing the depth of the wound, if reflected from its periphery by white drapes, results in glare and color fatigue. Intense illumination reflected from the white drapes about the field of operation in due time will cause eyestrain and headache, with general irritability. To overcome this effect, color of sufficient chroma to absorb the greater part of the reflecting rays should be used in the drapes. For this particular purpose, any dark color is serviceable. Black, gray or green are frequently used.

Color fatigue, however, is a problem that is separate and distinct from glare. The nerve endings on the velvet black surface of the interior of the eyeball select and register the various colors of the spectrum.

Reaction of Eye to Color

Color impressions are received by three groups of cones in the retina. One group is hypersensitive to red; another, to green; another, to blue. Each, however, is also sensitive to a lesser degree to the other hues of the spectrum.

When true complementary (orthochromatic) colors impinge upon the retina—for example, orange, red and blue green (minus red)—the result is the impression of pure white. Pollution with other colors gives gray.

White, therefore, does not exist except as a synthesis of true complementary colors. A full spectrum provides complementary colors that balance each other within the visual range yielding white.

The absence of color yields an impression of black. To gaze intently upon one portion of the spectrum for a period of time is to paralyze the response of the nerve endings for the particular portion. The color thus viewed loses its sharpness and its hue.

In order to obviate color fatigue the true complement to the red of the operative field should appear in the drapes that surround it. Drapes of this complementary hue, steam resistant and durable, are now available in the open market. When these are employed, the brilliance of the field is increased, differentiation of the tissues is enhanced and one can see more easily into the depth of the wound.

Proof of the complementary color is readily available. This may be determined by spinning a circular card on which are exposed the red color of the blood and its complementary green. The resulting neutral gray cannot be obtained unless these colors are true complements.

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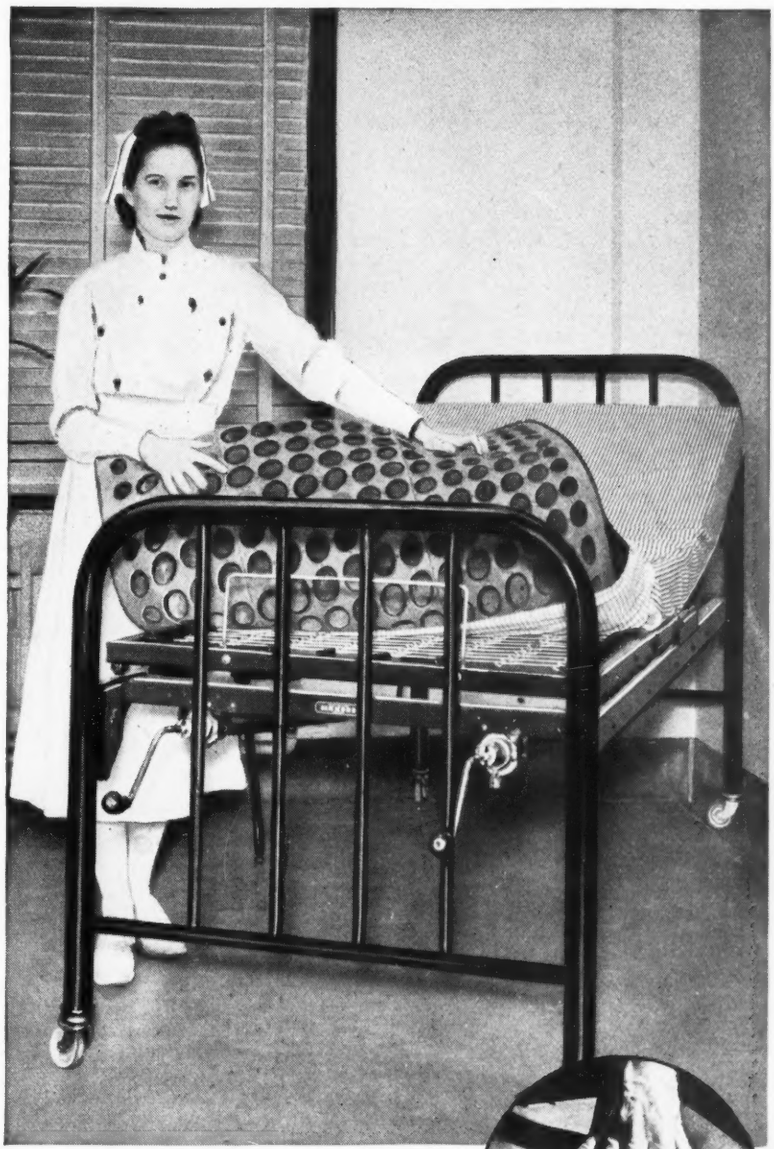

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Color complementation turns upon hue or what is ordinarily spoken of as the "color," as red, yellow, green, blue, purple or their intermediates. Complementary hues may be used through many grades of value, or brightness, and saturation, or chroma, to meet individual needs.

It is through these varying degrees of brightness or saturation that we are enabled to meet the psychologic needs of many individuals. Through this selection we are enabled to meet the radical and conservative tastes while still retaining the basic principles of our approach.

The practical applications, therefore, of the principles just stated as they apply to the object, the illumination, and the observer are: (1) all three factors must be considered simultaneously; (2) drapes alone will not provide relief; (3) light alone will not provide relief, and (4) the observer cannot be considered apart from the object, the illumination and the quality of color. Illumination must be viewed in its intensity and color value; observers must be protected against glare and color fatigue.

Facilities and equipment are now available to meet these particular scientific requirements.

Education in the Evening

ROBIN C. BUERKI, M.D.

THE University of Chicago, with the cooperation of the American College of Hospital Administrators, will offer an evening course in hospital administration next fall. The course will be open to administrators, assistant administrators, department heads and professionally interested persons who are endorsed by hospital administrators.

This is one of the new educational activities initiated by the A.C.H.A. for the benefit of administrators. Admission to the course will be granted only after an interview with the student adviser of the school of business and with the consent of the instructor. Students will be expected to meet the admission requirements of University College.

The course is to be offered during the autumn and winter quarters (Oct. 2, 1939, to March 15, 1940) at University College in downtown Chicago. Classes will meet Mondays and Fridays in the late afternoon or early evening. One weekly session will be devoted to a lecture by a Chicago hospital administrator; the other session will be a seminar under the direction of the university's teaching staff. If necessary, part of the lecture will be continued in the seminar session.

The research and reference library in hospital administration of the University of Chicago will be available to students in the evening session course. During the weekly seminar, the manual, "Problems and References in Hospital Administration," will be used as a general guide.

In lieu of the customary field trips the students will be asked to prepare case reports of their experiences, reviewing actual problems they have met in their own institutions. Special supplementary readings will be assigned to the students.

The work is planned to give the student an understanding of the administrator's approach to hospital problems. The course will be conducted at the problem level rather than by description of specific hospital practices and procedures. It will carry the student through two stages: (1) extent of the professional departments and care of patients and (2) integration of business and domestic services with the care of the patients. The development of the basic technics used to analyze hospital administration problems in relation to the objectives of institutions and departments will be emphasized.

The first part of the course will be concerned with the professional services of the hospital, including the extent and services of the present day hospital; national societies and their relation to hospitals; medical staff organization; nursing education and nursing service; medical records; out-patient department; medical social service; clinical and pathological laboratories; women's auxiliaries; operating and obstetric services; x-ray and pharmacy departments, and admitting and discharge procedures.

The second part will examine the subject of hospital administration with particular reference to the business and domestic departments, such as business office, plant maintenance, operation and construction, food service, laundry and linen supply, purchasing and storage, housekeeping, insurance, legal aspects of hospital administration and personnel relations. Community agencies and problems of social welfare that concern hospital administrators will also receive attention. The course will conclude with a summarization of the administrator's problems of supervision and control.

University credit will be given and the customary enrollment fees will be charged, which will amount to $60 for the two quarters. Registration may be made after consultation with Charles A. Rovetta at the school of business of the University of Chicago.

Guest lecturers for the evening course will include many of those who have served as lecturers in the graduate course in hospital administration. Dr. A. C. Bachmeyer and his associate, Gerhard Hartman, are in charge of the course.

Students who enroll in the course will be encouraged to take additional work in other courses, such as accounting, statistics, personnel management and business organization.

Doctor Buerki is president of the American College of Hospital Administrators.

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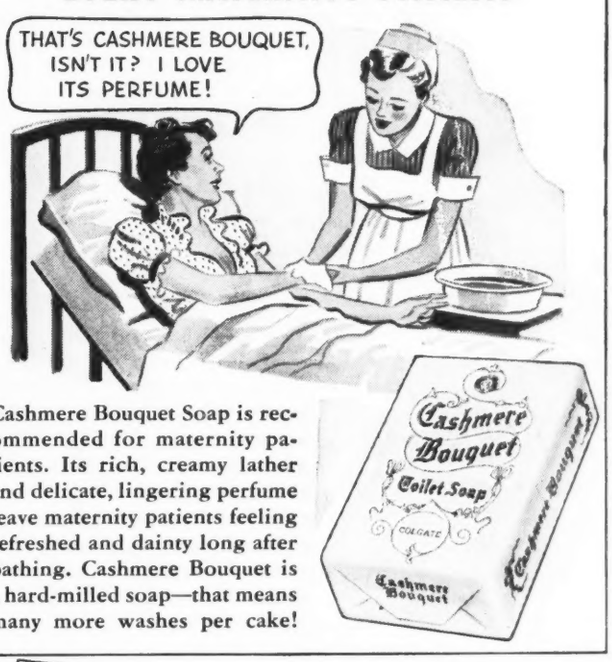

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The Trustee's Obligation

C. M. GREGORY WELLS JR.

ONE of the best methods of assuring the continued interest of hospital trustees is to assign a definite job to every member of the board, either as chairman of a committee or as a working member. The committees should be required to report their activities at every monthly meeting of the board. Furthermore, each committee member must have the qualifications for the particular job assigned to him whether it is legal, financial or the delicate matter of public relations.

Every trustee should be thoroughly familiar with every nook and corner of the hospital, as well as with its equipment and services. To acquire this knowledge he must visit the hospital and, in the company of the administrator, must go over it from top to bottom, receiving a thorough explanation of its facilities. It is not advisable for the trustee to do this without the guidance of the administrator. Such action is a direct reflection on the superintendent. The chairman of the board should be willing to visit the hospital two or three times a week. As head of the governing body, he should be thoroughly familiar with all that is going on. This cannot help but produce a well-informed board, which means interesting monthly meetings.

Superintendent's Responsibility

Much of the responsibility for keeping the board of trustees interested naturally falls upon the superintendent who must have the unqualified confidence of the board and who must give them his confidence.

With the aid of a capable administrator, the trustees cannot help but become thoroughly interested and familiar with the destiny of the hospital with which they are charged.

The greatest responsibility of any hospital board of trustees is for the professional standards of the institution. The first requisite is the appointment of an outstanding doctor to be chief of staff, someone who can be trusted and held responsible for the standards of professional performance. If that is not practical, as is true with many hospitals, a substitute must be provided in the form of a medical advisory committee appointed by the board from the active and consulting staffs.

On this committee the lay trustees can place the responsibility for maintaining a constant and accurate check upon the clinical performance and professional and ethical standards of the members of the staff. It can serve as an aid to the superintendent in formulating rules and regulations on all phases of professional services and on such other matters as affect the economical conduct of the scientific work of the institution. This committee should be one to which the trustees can turn for advice in professional matters and which jointly, with the committee from the board, forms an advisory council to set the standards to be maintained in the hospital. This matter is one that should be the primary concern of every hospital trustee.

The relationship between the medical staff and the board of trustees is delicate and cannot be satisfactorily developed overnight. The lay and the professional minds are far apart in many respects. It is difficult for the two groups to sit down together and iron out difficulties without indulging in personalities.

When there is no chief of staff, the joint committee seems to be the most practical method of approach. Conferences should be held monthly and the superintendent should be present as the liaison officer between the board and the medical staff; he is an intermediary in all dealings between them.

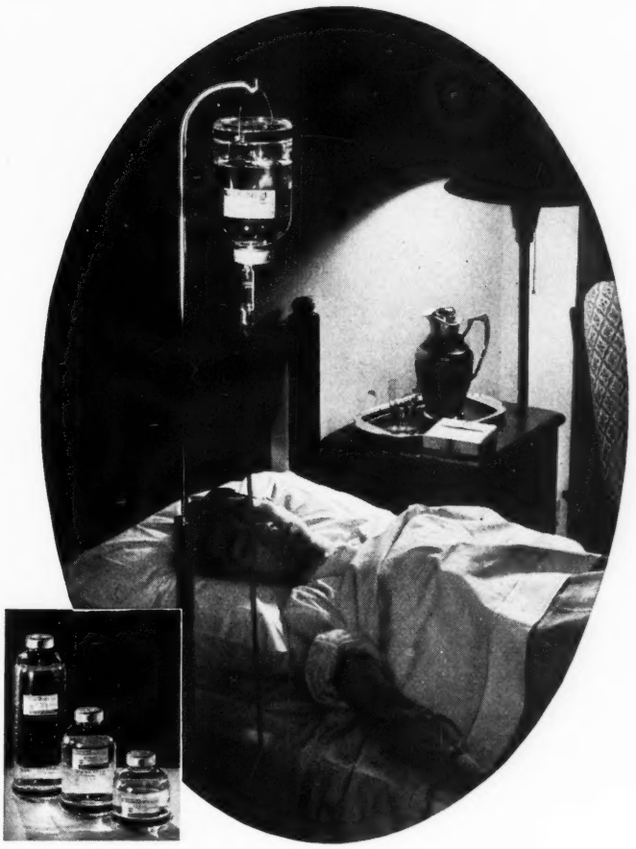
The program for such a conference should be planned well in advance and should include a presentation of matters of equal interest to the staff and the board, such as the work of the past month and a general discussion of any unusual or abnormal cases in the hospital during that period. All discussions should be impersonal and characterized by an earnest effort toward higher standards for medical care. Every opportunity should be given the staff members of this joint committee to present staff problems and suggestions, as this committee provides the only direct contact between the board and the medical staff. The board members must approach these problems and suggestions with open minds and a willingness to appreciate the professional point of view so that they can present them to the governing body for final action.

Staff Should Cooperate

The greatest step toward a pleasant and helpful relationship between the staff and the board of trustees is to develop a friendly relationship among the staff members toward one another. There is no limit to the progress that can be made with a friendly and well-organized staff. The staff that pulls together for the common good of the hospital and the patient is the most valuable asset that any hospital can have and spells its success or failure.

With the emphasis that is being put on the responsibilities of trustees, not only in business in general but in institutions, it behooves every such individual to be informed about what is going on in his hospital and to be thoroughly acquainted with hospital administration. The principal source of this knowledge and information is the superintendent of the hospital. Every meeting of the board of trustees should be an edu-

The author is chairman of the board of managers, Harrington Memorial Hospital, Southbridge, Mass.



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cation in itself. The administrator should sit in at every trustee meeting and at every subcommittee meeting. Strange as it may seem, there is a tendency on the part of hospital trustees, businessmen who would not do so in their own work, to try to do the work that is unquestionably the responsibility of the administrator, thus going beyond their true function of acting in a guiding and advisory capacity and of establishing policies.

This point should be emphasized by saying that no hospital superintendent can administer the affairs of the hospital properly if the members of the board or its various committees are writing letters on hospital matters to members of the staff or are running around doing odd jobs of which the superintendent has no knowledge. These jobs may be planned by board or committees but the execution of them is unquestionably the duty of the administrator.

There are many hospital magazines and manuals that the administrator should route to the trustees with articles of interest indicated. The careful reading of these articles is one sure method by which trustees can increase their knowledge on all matters pertaining to hospital administration.

A monthly report of the activities of the various committees will help to keep the other members of the board informed as to the work being carried on, thereby giving each member a thorough working knowledge of the hospital and its administrative functions. Whenever it is possible, trustees should visit other hospitals comparable in size and learn from their experience how they are handling their various administrative problems.

Let us hope the time will come when hospital accounting practices will be uniform in this country and will serve as a basis of comparison of hospital activities and administration with particular emphasis on per patient day costs in comparable situations. Let us also hope the time will come when more members of boards of trustees will attend conferences at both their state hospital association meetings and those of the national association. It has been my experience that there are more meat, more stimulation and finer objectives to be gained from these conferences than from any other source.

Do We Want Socialized Medicine?

WILLIAM A. SUMNER

THE National Health Act, which calls for an expenditure of $850,000,000 in the course of the next few years to provide medical care and hospitalization on a national scale, raises economic, social, political, professional and scientific questions too complicated to be discussed adequately in limited space. There are, however, serious objections to the scheme in every one of its aspects.

If that proposal is to be opposed effectively it will be necessary to devise a plan that will afford adequate medical care for those unable to obtain it because of the present cost. The problem is something more than merely one of cost and means of payment. Adequate medical care implies care in accordance with the highest medical standards and the most advanced scientific knowledge, under a system that will encourage constant progress in raising those standards and increasing such knowledge. The greatest objection to so-called socialized medicine is that under any such system progress seems bound to slow down and the growth of new knowledge, to become stagnant.

It does not seem possible for members of the medical profession, working as state servants for state wages, to have the incentive to study and progress that they have under the system still prevailing in this country, in which the members of the profession have a feeling of keen rivalry among themselves and in which success depends upon keeping abreast of the advances in scientific knowledge and taking part in its growth. Certainly, it does not seem that the state official, secure in his tenure of office and his official pay, will take as great personal interest in the individual patient as has the old-fashioned family physician.

The federal government will certainly have a predominant voice in the management of the institutions that it has provided or subsidized. Whether or not the members of the medical profession engaged in the proposed new or subsidized hospitals will be government officials at first, their appointment to positions in the system and their compensation will certainly be controlled, directly or indirectly, by some federal bureau in Washington. It is safe to predict that the system will not be in operation long before physicians will become government officials, receiving government pay under civil service tenure, and that the tendency will be to drive the private practice of medicine and surgery to the wall.

A published statement attributed to Dr. Irvin Abell, president of the American Medical Association, indicates that spot maps developed by the A.M.A.'s council on medical education and hospitals reveal only 13 counties in the United States that are more than 30 miles distant from an acceptable general hospital, although there are probably sections of the country, in the southern states, on the western prairies and in the Rocky Mountains in which hospitals are lacking. There is the economic question as to whether it is fair to tax the working man in the closely populated industrial areas to provide for possible deficiencies in the thinly settled sections of the country.

Our present advanced medical science owes its growth to the system of private medical practice, assisted by the philanthropic research institutions of the country. Is it wise to attempt to break that system down under the pretext of supplying its deficiencies? To a layman it would seem that it is unwise, that it would be better to devise means of affording it better support.

One method that seems to be well-established and promises to be greatly extended is the hospital service plan.

The next step is to extend hospital insurance to include the costs of medical care. The matter is now being studied and the difficulties do not seem to be insuperable. Some practical difficulties must be overcome, for example, preventing such abuses by patients and physicians as running up unnecessary charges for professional care.

Mr. Sumner is president of the board of managers, Paterson General Hospital, Paterson, N. J.

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Which Color — and Where?

EMMA M. BAHNER

This attractive sitting room for convalescents was once a delivery room.

CHEERFUL colors are now used to decorate the walls, curtains, floor and furniture in the public wards of the Jefferson Hospital, Philadelphia. Colors have been used in private rooms of the general hospital since the opening in 1907. When the Samuel Gustine Thompson annex was opened in 1924, every room in this building was supplied with sunfast, colorful chintz shades. Colors, such as pale greens, light blues and light tans with a brown trim, were used on the furniture in some of the rooms.

A program of restyling was started more than a year ago in the general hospital building, which included decoration of the rooms occupied by the interns. Each room received individual thought and study in the selection of colors. The old white beds were replaced with colored ones and the white walls were painted cream. Rose, gold, blue and green draperies, with colored bedspreads to match, and bureau scarves and rugs to blend with the color scheme, were used in each room to add a more homelike atmosphere.

The enthusiasm of the interns over this program of modernizing their rooms with color was manifest from the beginning. In refinishing a sitting room for the interns the walls were painted tan and brown, and maroon draperies were selected. The furniture, of stuffed brown leather, was built in the hospital by an upholsterer. The furniture harmonizes well with the walls, ceiling and floor, with a distinctly modern pattern of dark brown and gold.

During the last year colors in numerous shades and tints have appeared in the public wards. Four hundred round white tubular beds and cribs were replaced by modern square tubular fowler spring beds in a variety of colors. Ward floors of plain concrete were refinished in brown and waxed.

The pioneer work in decorating the wards and equipment was begun in the women's medical ward on the second floor of the main building. The first installation consisted of 24 peach cubicle curtains and 24 floating spring pale blue beds, a transformation in itself compared with the old tubular white enamel. The other furniture was repainted a pale blue to match the new beds.

This entire movement was initiated by an active women's board. The hospital continued the program of modernization by refurnishing first the gynecologic ward on the third floor in peach and blue-green. The new beds were painted a dainty peach and the furniture was refinished to match. The curtains enclosing the cubicles are a soft blue-green, which has come to be known as the special Jefferson color. The same colors were used in a nine bed women's special ward where the walls are peach. In the men's medical ward the new beds were painted a soft medium blue with the furniture to match while the cubicle curtains are light tan. Each color was carefully chosen for the particular ward in which it was to be used, the aim being to introduce color and variety within the bounds of good taste.

The 24 bed men's special ward on the third floor, the next room redecorated, was equipped with new blue-green beds and matching blue-green cubicle curtains. The single color was selected because it was felt that it gave a more masculine effect.

In the women's ward for nervous patients, an eight bed room on the second floor, a light green was chosen for the new beds, cubicle curtains and furniture, on the theory that it suggests cheerfulness to this type of patient.

Another ward of 14 beds on the medical floor has aroused comment because it is decorated in red and

The author is housekeeper at the Jefferson Hospital, Philadelphia.

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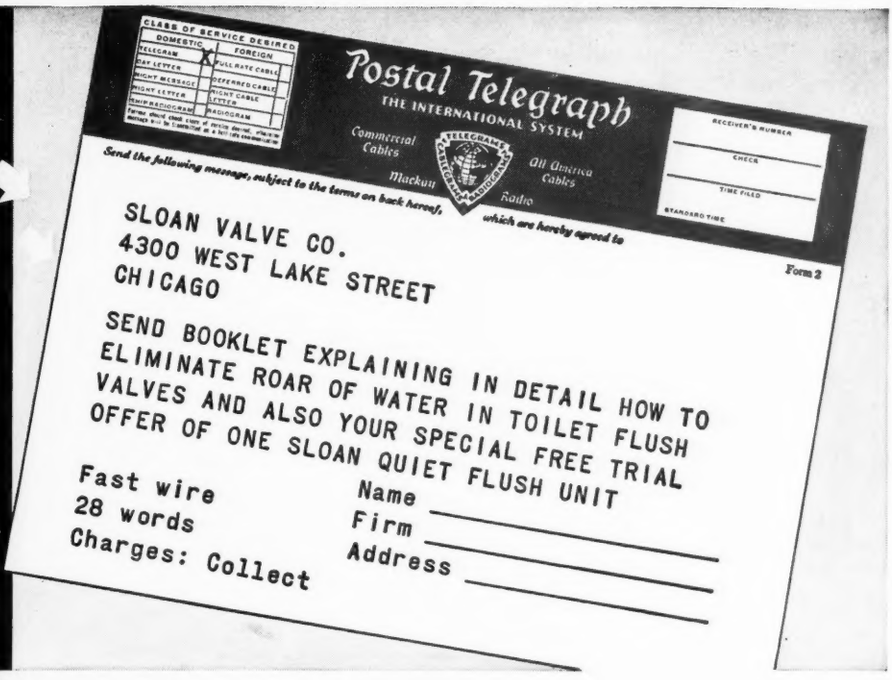

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white. The new beds and furniture are red and the cubicle curtains, white. Patients seem well pleased with the shade of red, stating that they find it restful and soothing.

The urological ward of 15 beds on the fourth floor was modernized with furniture repainted yellow and with new yellow beds. Green cubicle curtains were chosen in this instance. Yellow was selected for this department because of its high luminosity.

The maternity department was furnished with new blue beds and repainted blue furniture. The cubicle curtains are white. Pale blue was also chosen for the nursery and no color could have been more popular.

The bronchoscopic department with new blue-green beds, curtains and furniture in its five bed wards radiates a feeling of cheerfulness. In this department a dining room and classroom for children were redecorated in blue and white. Framed pictures suitable for the youngsters were hung on the wall. The oblong white table, 16 blue small sized chairs and a radio in matching color combine to make a picture of joy and contentment.

The children's ward on the eighth floor of the main hospital also has been refinished. Steel casement windows have been installed throughout, and blue venetian blinds have been hung. There are 24 especially designed cribs finished in a pale blue; the furniture was painted light blue and the walls were decorated in a lighter shade. A new solarium for infants has been built with individual and completely furnished metal cubicles, each equipped with running hot and cold water. This unit has been finished entirely in blue.

The ward kitchens on the second, third and fourth floors of the main building, which have been in use since the original structure was erected in 1907, have been refloored with red quarry tile. Walls were finished with a cream colored tile to the height of 4½ feet; above this, they were painted cream. Stainless metal equipment replaced the antiquated and worn equipment that had been used in the kitchens.

A modern air-conditioned central sterilizing and supply suite is located on the site of the old accident ward, the latter having been moved into the Curtis Clinic when it was opened several years ago.

The hospital is indebted to the women's board for the opening of a new sitting room for convalescent patients and their visitors in a vacated white tile circular delivery room on one of the private floors in the main building. The color of the furniture is green; the ceiling, rug and venetian blinds are rose, and white tile walls form the background. A similar room on the sixth floor was refinished by the women's board for the use of patients and their visitors. Here the decorative scheme is blue and white: white ceiling, white leather upholstery, white venetian blinds and blue walls and rugs.

The dining rooms have been redecorated, the walls being repainted green halftones, with green and gold flowered linen draperies. The furniture in a number of the private rooms has been refinished in a variety of colors, such as blue and white, green and gold, tan and ivory, and blue and silver. All the walls in these rooms are an eggshell tint. Several sitting rooms on the private floors of the annex have been refurnished, one with maple furniture, green curtains and flowered chair covers.

Another sitting room has been done over in Victorian style. The draperies of flowered chintz in maroon, blue and peach were selected first and from them the scheme of decoration was developed. The walls, venetian blinds and rug are peach; the lamp and cushions, blue, and the furniture is a maroon mohair.

The chest department of the hospital has been redecorated throughout. The men's ward was finished in green and white. The beds, chairs and bedside tables are green, while the overbed tables are a natural maple finish. The walls are a lighter green and the ceiling is white.

A pink and white color scheme was used in the women's ward. The beds are pink, the walls are pink and white and the ceiling is white.

This program of restyling stands for progress inspired by the enthusiasm of the women's board, the men's board, the staff and other hospital personnel.

THE HOUSEKEEPER'S CORNER

• Those who attended the conference of hospital executive housekeepers at the Tri-State Hospital Assembly on May 3 and 4, under the enthusiastic chairmanship of Mrs. Alta M. LaBelle, Michael Reese Hospital, Chicago, saw and heard things that well repaid them for the time spent.

The principal speaker on Wednesday afternoon, May 3, was Mrs. Mildred Page of Henrotin Hospital, Chicago, whose topic was linen control in the small hospital. Mrs. Page stressed the gains in efficiency and economy of standardizing the materials used in the sewing room. She also outlined the system of linen distribution in practice at Henrotin Hospital, which has the three advantages that (1) special needs of patients are met without unduly burdening the floor supervisor; (2) full control is given to the linen room, and (3) stains and tears are kept to a minimum in the laundry.

Two inventions of Mrs. Page's department interested her audience particularly. They were an electrode carrier made of flannel into which electrodes can be placed when they are not in use and which keeps them from getting tangled, and a wrapper made of brown sheeting into which babies' bottles are placed before they are put into the autoclave for sterilizing. The wrapper is made somewhat like a silver holder, with compartments for twelve bottles. When it is rolled the layers of cloth protect the bottles from being cracked or broken.

The Thursday session was devoted to the care of floors and walls. A new type of cement flooring that has been developed at the Mellon Institute of Industrial Research was demonstrated by its inventor. The two outstanding features of the material are that it is germicidal and nonsparking. The latter feature makes it particularly valuable in operating rooms. The introduction of from 10 to 15 per cent of copper mineral accounts for its bactericidal effect. Tests have proved that bacteria will not live in moisture that has been spilled on this floor.

Altogether, an instructive time was had by all at the two sessions.

A MESSAGE TO HOME CANNERS FROM THE CANNING INDUSTRY

● Every year, in various regions of the country, a considerable amount of the produce from thousands of small orchards and gardens is preserved for future use by canning in the home. Despite much that has been written on the subject (1), outbreaks of botulism from improperly heat processed home-canned foods continue to be reported.

To eliminate the possibility of botulism from their products—specifically those foods of the "non-acid" type—home canners should take a page from the experience of commercial canners. Through considerable research, the American canning industry has scientifically established the necessary processing requirements for products of this character. For non-acid foods, modern canners employ only recommended process time and temperature schedules(2) known to be adequate to destroy the heat-resistant spores of clostridium botulinum whose growth produces the toxin which causes the deadly type of food intoxication known as botulism.

Brief comment on the heat-processing requirements of common foods might be in order. In general, foods or food products may be classed into two groups according to their acidity, i.e., the "acid" and "non-acid" classes with pH values below and above 4.5, respectively. The acid foods include tomatoes and the common fruits. These foods are not favorable to the growth of clostridium botulinum and consequently they may be safely processed at 212°F., or the temperature of boiling water.

The non-acid products, however, present a special processing problem. Such products —meat, fish, fowl, milk and most common vegetables—can be adequately processed only at temperatures above 212°F. As the records indicate (1) botulism in home canned foods may result from processing non-acid foods in boiling water. Safe canning of these foods in the home, therefore, requires the use of properly operated "pressure cookers"—identical in principle with the "retorts" used by commercial canners —which will permit the use of a process under steam pressure. Usually 10 lbs. steam pressure is used in these cookers which corresponds to a processing temperature of 240°F.

Home canners desiring to pack non-acid products should obtain a copy of United States Department of Agriculture Farmers Bulletin No. 1762. In this bulletin are described the necessary equipment, precautions, and time and temperature processing schedules required for the safe canning of non-acid foods in the home. If the necessary equipment cannot be obtained and the recommendations contained in the above bulletin cannot be faithfully followed, some means of preservation of non-acid products other than canning should be sought.

In the interests of public health, it is our sincere hope that home canners may soon become educated to the necessity of steam pressure processes for non-acid foods. Experience dictates that only by processes of this type, with a time and temperature schedule suitable for each particular product, can botulism from non-acid home canned foods be effectively controlled and ultimately eradicated.

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1. 1934. J. Home Econ. 26, 365-376.
   1935. Amer. J. Pub. 25, 301-313.
   1935. J. Amer. Med. Assn. 105, 205.
   1936. Food Research 1, 171-198.
2. 1937. National Canners Association, Washington, D. C. Bulletin 26-L, 3rd Ed.

We want to make this series valuable to you, so we ask your help. Will you tell us on a post card addressed to the American Can Company, New York, N. Y., what phases of canned foods knowledge are of greatest interest to you? Your suggestions will determine the subject matter of future articles. This is the forty-eighth in a series, which summarize, for your convenience, the conclusions about canned foods reached by authorities in nutritional research.

The Seal of Acceptance denotes that the statements in this advertisement are acceptable to the Council on Foods of the American Medical Association.

How to Start a Food Clinic

MARTHA WARNE

AS THE interest in public health becomes greater, the need for food clinics in the out-patient departments of hospitals becomes increasingly urgent. New food clinics are being organized to meet the demand and, because this unit of the dietary department is a comparatively new one, it is well to consider its function and organization.

The purpose of a food clinic as expressed by the American Dietetic Association is: "to aid in the dietetic treatment of the ambulatory patient by interpreting to the patient the doctor's food prescription in terms of the patient's special environmental situation; to serve as a teaching center for students in the field of health and disease." This definition assumes several things, *i.e.* a patient, a doctor, a teacher and a place in which to teach.

Let us consider the last of these items, a place in which to teach, because a food clinic should have a place set aside for its own use in order to do proper teaching. The physical equipment need not be elaborate. A pleasant room large enough to accommodate several patients and the dietitians, with desks or tables to hold teaching equipment and with cupboards in which to store supplementary materials and supplies, is sufficient at the beginning. The ideal clinic is equipped with an icebox and with a range and china so that class instruction in food preparation may be given. It has a pleasant waiting room for patients and separate offices for each dietitian. Models that show the proper sizes of servings, as well as charts and posters of good artistic balance that teach lessons in nutrition, add to the ease and effectiveness of teaching.

The little colored boy is learning at an early age the importance of proper food to health. The picture was taken in the food clinic of Cook County Hospital.

These aids may also come as the clinic develops. But even these are supplementary to the proper spirit of eagerness to teach and faith in the usefulness of the clinic.

The person in charge of the food clinic should have home economics training with special training in food clinic administration. She should be a teacher and a person who likes and is able to meet all classes of people. Whether the clinic will be merely a place that gives out diets or will be a teaching center to which patients and students alike will turn for help depends on the dietitian's faith and interest in her work and on her enthusiasm for its growth.

With a place to teach and a dietitian eager to do the teaching it is necessary to have patients come to the clinic. The manner in which they are referred depends upon each institution. In the well-organized out-patient department the patient is referred by the doctor in the clinic that desires dietary instruction for the patient. This is usually the medical clinic as most conditions requiring diets are medical, such as gastro-intestinal diseases, diabetes and metabolic disturbances. However, the prenatal, orthopedic and children's clinics, to mention only a few of them, also refer patients to the food clinic. The food clinic does not teach therapeutic diets only. To fulfill its purpose it must teach normal nutrition as well, and all patients can profit from the services a food clinic is eager to offer. In the event that there is no medical clinic the patients are referred directly from the clinic that handles the particular disease.

Miss Warne is dietitian in charge of the food clinic, Cook County Hospital, Chicago.

When it's Winter in Buffalo, it's Midsummer at Mac-Doel's!

IT GETS pretty cold up in Buffalo . . . and plenty snowy!

But, no matter how low the mercury is lurking, it's midsummer at Mac-Doel's on Main Street! Midsummer—with all its grand and glorious riot of farm-fresh vegetables . . . peas, asparagus, corn, spinach, broccoli.

How come? . . . because Mac-Doel's consistently, winter and summer, keep their patrons happy with Birds Eye Frosted Foods!

And not only do they serve Birds Eye Products in July as well as January, but they *feature* them . . . *advertise* through their attractive window displays that they use plenty of these farm-fresh, quick-frozen foods.

As direct evidence that this startling departure is successful, we offer part of a letter from Mac-Doel's Francis M. McGuire:

> "Mac-Doel's take pride in serving vegetables with all the color and original food value preserved for those who dine with us. 'Birds Eye' gives us all this and more. The elimination of labor and waste of vegetable preparation allows our kitchen exact serving costs. We find that we are always sure of the very best and the very freshest, year around. *And we feel that our consistent merchandising of the 'Birds Eye' name and 'Birds Eye' quality brings us extra business.*
>
> Mac-Doel's entire organization cannot recommend 'Birds Eye' too highly."

If *you* don't already serve Birds Eye Frosted Foods—why not try them? If you do, tell the public. It's getting to be a bigger selling point every day.

Either way, talk over your daily food problems with your local Birds Eye distributor. He'll have some helpful suggestions.

Have you tried Birds Eye Baby Limas?

Birds Eye Baby Limas will *wow* your vegetable-loving patrons! These tender, economical tidbits come in 2½-pound packages containing 20—24 servings. (Also in 5-lb. packages.) Shelled, cleaned, ready to cook.

Try Birds Eye Strawberries, as well. They make a good meal *perfect.* Grand on shortcakes and ice cream.

There are over two dozen Birds Eye fruits and vegetables.

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When the food clinic is associated with a hospital, as is often the case, it continues the work begun by the hospital dietitian. The patient is referred to the clinic in the out-patient department that will follow him after his discharge from the hospital and further dietary orders and diet changes are referred to the food clinic.

The teaching methods employed in the food clinic are varied. The basic method is that of individual instruction. Each patient is unique in his environment and background, and a diet that is to be carried out in the home must fit into that background as much as possible. Each diet is adjusted to the individual needs and requirements within the diet order given by the doctor. To this end a history is taken on each patient and each diet is written out. Visual educational methods are used, in addition to the written and oral instructions. Measurement of food with the proper cups and spoons may be demonstrated for diets that require accurate measurement. Charts showing the source of the food constituents and their use in the body emphasize why particular foods are stressed in the diet. These charts and posters may be made in the clinic at very little cost.

Class instruction is given to supplement individual instruction. These classes bring up problems common to the group of patients and serve to add to the patient's knowledge about his diet. Specific examples of this class teaching will be discussed later.

Records Are Important

The new food clinic must develop its own record forms. Foremost among these is the nutrition history that must be taken on each patient in order to know the background of nationality, economic and mental status and food habits. The history varies with each clinic but it is as permanent a part of the patient's clinic record as any of the medical data. There should be record sheets for noting progress of the patient and forms on which to write out the dietitian's instructions. It is suggested that anyone interested in beginning a clinic write to the American Dietetic Association where such forms are on record from most of the organized clinics.

The food clinic is a part of an organization that is working for the welfare of the patient. If it is to fulfill its part it must, of necessity, work in harmony with the other departments in the organization. It is important that the food clinic from its beginning make known its policies and objectives to the other departments and plan with them for the best utilization of all the departments. There are many ways in which the food clinic may work with other departments so as to use the knowledge of each for the general welfare of the patient.

An example of this type of cooperation is the series of classes given to the diabetic patients in Cook County Hospital, Chicago. It was found that new diabetic patients and those who were not following instructions closely needed instruction in addition to the individual teaching that had been given them. A series of classes was organized, taking about 15 patients in each class and having the same group of patients come back for five classes. The first lesson is taught by the doctor, who tells the patient about the disease from the medical point of view, the next two lessons are taught by the nurse, who gives instruction on hygiene, proper insulin technic and other problems that the nursing service is especially qualified to teach. The last two lessons are taught by the clinic dietitian and give added emphasis to the diet. Such a plan allows each department, medical, nursing service and dietary, to give its particular instructions to the patient.

Another example of this teaching in Cook County Hospital is that done in the prenatal clinic. New patients at each clinic are taken in groups of two or three and instructed by the nurse in the clinic concerning hygiene and care of the body during pregnancy; then the dietitian from the clinic talks to the group concerning the diet. Each patient is given a copy of the normal diet for pregnancy and the reason why the various food constituents are needed by the body is explained by means of charts. These examples of class teaching give a hint as to the type of service that a new clinic may develop in cooperation with other departments in the clinic.

The social service department contributes a great deal to the success of the food clinic when the two departments work in harmony. Many diet problems are related to social and economic problems and the solution of these comes only from the combined efforts of the two departments. The person in charge of the food clinic should become acquainted with the policies, philosophy and services of the social service department in her institution. The cooperation of all departments working for the welfare of the patient makes the teaching of the food clinic more effective and establishes it as an important unit in the out-patient department.

The teaching of diets to the patients is, of course, the most important function of the food clinic, but it may also contribute to the out-patient department in a wider sense by preparing material on normal nutrition for the clinic patients as a whole. This may be done by means of posters and exhibits set up in the waiting rooms. Patients often wait for a long time for the doctors and such material is of great interest to them and is an effective method of teaching.

Enthusiasm Needed

It will be seen that from the simple beginning of a room and a dietitian the food clinic may grow to be a very real part of the out-patient department. Progress may be slow because a department that is interrelated with many others cannot make changes and formulate policies except as these policies fit in with those of the organization as a whole. There easily may be stagnation for a beginning clinic for this reason. Enthusiastic plans that cannot be carried out immediately are in danger of never being executed. However, if the clinic can prove its usefulness the desired objectives will probably be attained provided the people concerned with the food clinic retain their enthusiasm and do not lose sight of the objective. There is still much pioneer work to be done in educating other departments within the hospital and the out-patient department as to the fundamental purposes of the food clinic. This can best be accomplished by bringing to the new clinic the proper teaching spirit and faith in the importance of the work it is designed to perform.

Planning the Bake Shop

MARGARET E. TERRELL

THE hospital bake shop is that part of the institution kitchen that manufactures breads and desserts. The size of this unit and its importance vary greatly. Its size depends upon the policies of the establishment concerning the use of homemade or commercially made products and upon the amount and type of breads and desserts required. Hospitals located in a city in which a satisfactory quality of loaf breads, rolls and ice creams is obtainable at a low cost often consider the maintenance of a bake shop a doubtful economy. Many hospitals, on the other hand, find not only that it is desirable economically to do their own baking, but that it improves their food service through the control of quality and variety. Most hospital food departments include a bakery unit of some size.

The organization of the work of the bake shop falls into four main units: (1) bread making, (2) dessert preparation, (3) storage and distribution of products and (4) pot washing and storage of clean utensils. The volume and type of foods required must be estimated carefully in order to plan for adequate equipment.

Good organization means that the work proceeds from beginning to end in a consecutive manner with the fewest motions. In general, bakery routine begins with obtaining materials from storage and taking them to the unit for preparation and, from there, to proofing and baking or processing. The bread baker, since he uses large quantities, will take most of his materials directly to the mixer; from the dough trough he goes to the tables, using scales, dough divider and pans, and then to the proof box, oven and racks.

The dessert maker works continually from the supplies in and on the table and should have his equipment grouped in relation to the work at the table, giving preference in proximity to the pieces used most often. The necessary utensils will include a mixer, a hot plate, baker's furnace, either a steamer or a steam kettle, sink and ice cream equipment. Scales are an essential part of the baker's equipment and should have a convenient place for storage and use. The establishment that plans to use a quantity of frozen fruits for pies and puddings should provide a sufficiently large ice cream sharp room to keep deliveries of fruit.

It is generally acknowledged that equipment must be cared for and operated in such a manner as to yield maximum results at minimum expense. Labor should be given an equal amount of consideration. The bake shop personnel represents a given amount of energy. The unit should be designed so as to protect this energy for productive labor.

There is a wide variety of flooring materials from which to make a selection, ranging from relatively inexpensive cement and magnesite to the more expensive maple and quarry tile. A hard floor possessing little resilience or an extremely smooth surface will fatigue the employe through the jarring of the body with each step and the continual muscle tension. Cork composition or wood floors have the advantage of quietness and resilience and tiles, that of durability, ease of cleaning and attractive appearance.

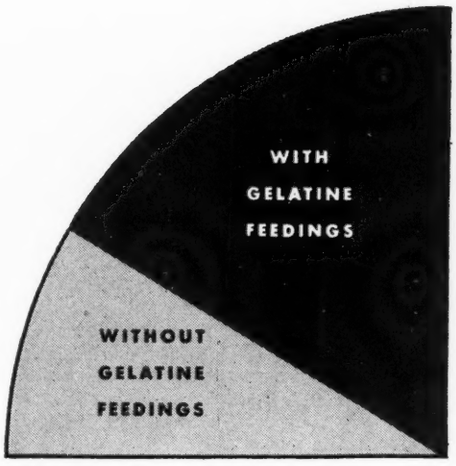
Certain essential information is required in designing a bake shop, including the amount and type of food, facilities required, equipment and material values and good housekeeping principles

A comfortable, efficient workshop is quiet and peaceful, well-lighted and airy. Sufficient illumination, either natural or artificial, should be provided and so placed as to avoid glare and shadow. A lighting expert or physicist may be called upon to advise on the candle power and distribution so that the room will be properly illuminated. Good ventilation is important to remove stagnant air and the fine dust-like particles of flour. In institutions in which the kitchen is given the preferred location, the bake shop is frequently located in an inside room without enough windows for adequate ventilation. When this situation exists good artificial ventilation should be provided.

Inadequate equipment will cause a break in the continuity of the work. Lack of small equipment, such as scales, pans and spatulas, frequently causes inconvenience and loss of time. Poor arrangement of equipment will result in distractions from work. Main thoroughfares for delivery of supplies should not pass through work units. Equipment that is to be used by the workers of more than one unit should be placed so that its use by one group will not interfere with the work of others. Pan racks, power mixers, refrigerators and hot plates are typical of such equipment.

Judgment in the selection of bake shop equipment should be based on the comparative efficiency of the machine's operation, records of durability and cost of upkeep of similar machines in use in hospitals demanding approximately the same output. The equipment investment for this unit is comparatively large and deserves thorough examination of available makes and their records of service, before purchasing. The probable permanence of the firm and of the model of the machine deserves consideration although the latter is difficult to estimate even by the firm itself. The fact that repairs or parts

Miss Terrell is director of residences and dining halls, University of Washington School of Home Economics, Seattle, Wash.



Light area represents a day's energy output by a test subject during the training period before gelatine feedings were started. Dark area represents a day's energy output by the same subject after gelatine feedings. In both cases the subject worked to the point of exhaustion.

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"Proceedings of the Society for Experimental Biology and Medicine", 40:157, 1939.

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Empty one envelope of Knox Gelatine in a glass three-quarters filled with cold water or fruit juice (or half water and half fruit juice). Let the liquid absorb the gelatine. Then stir briskly and drink immediately before it thickens. Take four times a day for two weeks, then reduce to two envelopes a day. (May be taken before or after meals).

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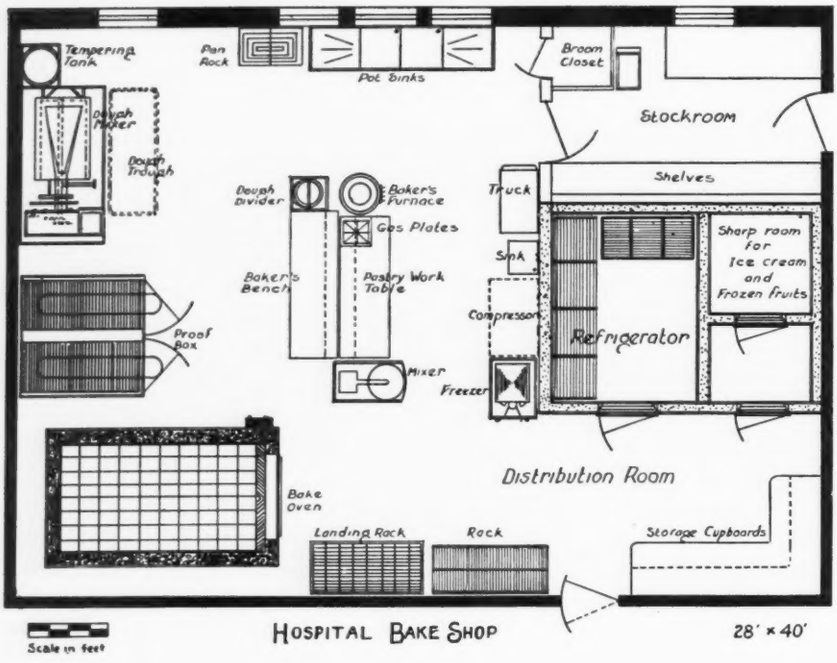

for obsolete machines are usually expensive should make the buyer cautious. Quietness and convenience of operation, safety features, appearance, maintenance cost, ease in cleaning and space requirements are important features in equipment selection.

Economic planning for the installation of equipment will involve a comparison of the saving on labor through convenient arrangement and the saving on installation expense through the grouping of equipment. In planning the layout, routing work for efficiency is a prime consideration. It is frequently possible, however, to economize on installation cost without interfering with an efficient work plan. Gas, electric and steam lines for cooking; water connections and drains for sinks and steam equipment; the insulation and refrigeration plumbing in refrigerators, and the ventilation hoods and ducts should not claim more than their share of the initial kitchen cost.

Attractive, orderly surroundings tend to promote greater interest and pride on the part of the personnel in maintaining high standards for the products and care of the unit. The bake shop designer can incorporate many details in his plan to facilitate housekeeping. Smooth, easy-to-clean surfaces and well-rounded corners are important. Cracks or sharp corners, in which flour, dough or sticky substances may lodge, are expensive in cleaning time, present a sanitation hazard and mar the appearance. Floor drains should be placed where there is likely to be the greatest amount of spillage or soil and the floor should be given a slight pitch from the sides of the room. There should be drains near the refrigerators, the steamers, the ice cream making equipment and the pot sink. Good housekeeping may be encouraged by having the cabinet for cleaning materials in a convenient location.

The distribution room should be convenient to the serving room. Racks, refrigerators and storage cupboards for breads and desserts should be located so that service employes can get these items of food without going into any of the work units of the bakery. A work table and slicer should be provided next to the storage for loaf breads. In hospitals in which the serving space is crowded the toaster may be placed in the distribution room near the bread slicer.

The bake shop, whether large or small, calls for pieces of equipment that are of comparatively high initial cost, such as ovens and mixers, and for skilled employes of a relatively high wage group. Expenditures for this department merit careful planning in advance on the basis of the hospital's particular requirements and on the efficient organization of work.

FOOD FOR THOUGHT

• The agricultural experiment stations of Washington and Oregon recently made a survey to discover the most desirable heights for sinks, work tables, ironing boards and cupboard shelves. The women interviewed varied greatly in physique, their height ranging from 5 to 6 feet and their weight, from 95 to 240 pounds. It was found that the most satisfactory height for food preparation tables was from 30 to 33 inches and for kitchen sinks, 31 or 32 inches from the bottom of the sink to the floor. Top shelves should be no more than 77 inches high.

• Buying citrus fruit is greatly aided by a booklet published by the Florida Citrus Commission, Lakeland, Fla., entitled "List of Registered Labels, Brands and Trademarks for the Season 1938-39."

• The banana is a recognized health food. It contains Vitamins A, B and C, as well as mineral salts. Combined with milk it makes a practically balanced meal.

• President Miller of the Pennsylvania Dental Society reports that soil erosion may be partially responsible for defective teeth, since food grown in impoverished soil has been found to be deficient in calcium and phosphorus, the minerals necessary for sound teeth.

• June marks the opening of the season for cantaloupes, watermelons, cherries, peaches and green corn. Rhubarb and strawberries usually are at or close to their monthly peak for the year. Supplies of lettuce and tomatoes generally increase sharply and new potatoes replace old potatoes as the major source of supply.

• When camping, remember that altitude affects leavening agents. As the altitude increases, the volume of gas liberated increases, thus the quantity of baking powder and soda in a recipe should be decreased in proportion to the altitude above a height of 3000 feet.

• Buyers interested in finding out how to judge fresh fruits and vegetables will find Miscellaneous Publication 167 of the Department of Agriculture, "A Fruit and Vegetable Buying Guide for Consumers," helpful. This 61 page publication can be obtained from the Superintendent of Documents, Washington, D. C., for 5 cents.

July Menus for the Small Hospital

Nellie Engelbracht

Dietitian, Bismarck Evangelical Hospital, Bismarck, N. D.

	Breakfast		Supper				
Day	Fruit	Main Dish	Soup	Main Dish	Potatoes or Substitute	Vegetable or Salad	Dessert
1.	Cantaloupe	Muffins, Honey		Bacon, Escalloped Macaroni With Cheese		Fresh Vegetable Salad	Rhubarb Sauce, Gingerbread
2.	Applesauce	Bacon, Toast		Creamed Beef on Toast	Buttered Rice	Celery, Olives on Lettuce	Apricot Sauce
3.	Orange	Soft Cooked Egg, Rolls	Tomato-Celery	Salmon Salad	Baked Potato		White Cake With Caramel Frosting, Cherry Sauce
4.	Rhubarb Sauce	Bacon, Toast		Cold Boiled Ham	Potato Salad, Hot Rolls		Fresh Pineapple, Cookies
5.	Orange Juice, Prunes	Toast		Cheese Soufflé		Waldorf Salad, Buttered Spinach With Lemon	Plum Sauce
6.	Grapefruit Sauce	Rolls With Preserves		Escalloped Chicken With Rice		Creamed Fresh Peas, Celery	Rhubarb Sauce, Fruit Cookies
7.	Fresh Apricots	Bacon, Toast		Escalloped Spaghetti With Cheese		Lettuce With Bacon Dressing, Buttered Asparagus on Toast	Pear Sauce
8.	Cantaloupe	Rolls	Cream of Tomato		Stuffed Potato	Deviled Egg on Lettuce	Cherry Sauce, Cookies
9.	Pineapple Juice	Bacon, Toast		Scrambled Eggs on Toast		Escalloped Cauliflower, Asparagus Salad	Frosted Graham Crakcers, Peach Sauce
10.	Fresh Peach	Poached Egg on Toast			Baked Potato	Sliced Tomato and Cottage Cheese Salad	Applesauce, Spice Cake
11.	Rhubarb Sauce	Rolls		Creamed Tunafish on Toast		Buttered Fresh Spinach With Lemon, Celery	Fresh Fruit Gelatin
12.	Prunes	Scrambled Eggs, Toast	Vegetable	Cheese Fondue		Pear-Apricot Salad	Fresh Pineapple
13.	Orange	Muffins, Honey		Chicken Salad	Creamed Rice		Apricot Sauce, Chocolate Drop Cookies
14.	Fresh Apricots	Omelet, Rolls		Welsh Rabbit on Toast		Tomato Juice, Crackers	Pear Sauce, Prune Cake
15.	Rhubarb Sauce	Soft Cooked Egg		Creamed Beef on Toast	Stuffed Potato	Sliced Tomato Salad	Cherry Sauce
16.	Grapefruit Sauce	Bacon, Toast		Cold Sliced Ham	Potatoes au Gratin	Celery, Ripe Olives on Lettuce	Fruit Cocktail
17.	Cantaloupe	Toast With Strawberry Jam		Bacon	Escalloped Potatoes	Fresh Vegetable Salad	Plum Sauce, Banana Cake
18.	Orange Slices, Prunes	Toast		Escalloped Tunafish and Spaghetti		Shredded Lettuce	Peach Sauce, Cookies
19.	Applesauce	Bacon, Toast	Cream of Potato	Cold Beef Sandwich		Jellied Fresh Vegetable Salad	Plums, Cup Cake
20.	Apricot Nectar, Pineapple Juice	Soft Cooked Egg, Toast		Chicken in Gravy on Toast	Browned Noodles	Stuffed Celery	Pear Sauce, Chocolate Drop Cookies
21.	Grapes	Rolls		Escalloped Macaroni With Cheese	Bran Muffins and Honey	String Bean Salad	Fresh Fruit Gelatin
22.	Cantaloupe	Poached Egg on Toast		Escalloped Tomatoes	Stuffed Potato	Cottage Cheese on Lettuce	Cherry Sauce
23.	Applesauce	Bacon, Toast		Ham Soufflé	Creamed Rice	Pineapple Juice	Rhubarb Sauce, Sugar Cookies
24.	Orange	Rolls With Preserves		Creamed Tunafish on Toast		Olives, Fresh Vegetable	Peaches, White Cake
25.	Apricots	Scrambled Eggs, Toast		Cheese Fondue	Creamed Parsley Potatoes	Waldorf Salad	Plum Sauce
26.	Grapefruit Sauce	Bacon, Toast	Celery Broth	Escalloped Chicken With Noodles		Orange-Banana Salad	Rhubarb Sauce
27.	Cantaloupe	Muffins With Preserves		Bacon	Spaghetti With Tomatoes	Celery Hearts	Baked Apple, Filled Cookie
28.	Grapes	Rolls or Toast		Scrambled Eggs on Toast	Creamed Rice	Lettuce, French Dressing	Fruit Cocktail, Wafers
29.	Pineapple Juice	Bacon Omelet, Toast		Toasted Cheese Sandwich	Escalloped Cauliflower	Perfection Salad	Apricot Sauce
30.	Prunes	Bacon, Toast		Creamed Beef	Browned Noodles	Grapefruit Salad	Cherry Sauce, Cookies
31.	Fresh Apricots	Soft Cooked Egg, Rolls		Cheese Soufflé	Creamed Potatoes	Celery	Ambrosia, Banana Cake

Recipes will be supplied on request by The Modern Hospital, Chicago. Space precludes listing of cereals, several varieties of which are always offered for breakfast.

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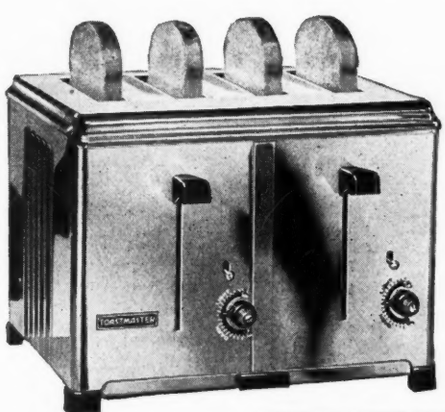

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Apprentices in Hospital Pharmacy

C. B. JORDAN

In order to supply the demand for well-trained pharmacists, the author feels that hospitals should offer apprenticeships that will give pharmacy graduates the necessary training in hospital work

EXECUTIVE officers of hospitals are coming to realize the value of hospital pharmacists in the economy of hospital management. For years the state pharmacy laws have been and are still being violated by certain hospitals in that medicines are being dispensed by people who are not legally qualified to dispense them.

The argument for such practices has been that the hospital could not afford to employ a full-time pharmacist and part-time pharmacists are not available. In many hospitals medicines are dispensed by nurses, assistant superintendents, interns, medical students and a variety of hospital attendants. All of this is illegal. These medicines are supposed to be dispensed under the supervision of the attendant physicians, but it is a well-known fact that in many cases the attendant physician pays little or no attention to this most important part of good hospital practice.

A well-trained hospital pharmacist can save the management more than the price of his salary. He is trained to purchase drugs carefully and economically. He knows the counterpart of many of the expensive proprietaries and can purchase standard products under their official or chemical name and thus avoid the heavy overhead owing to the price of patent or trade names. The nurse, assistant superintendent or even the supervising physician sometimes falls victim to the wiles of a good detail agent and purchases proprietaries under their trade names when the same products can be purchased under their official names at a great saving to the hospital. The pharmacist who is familiar with both trade and official names and also familiar with purchasing drugs will be much less prone to fall for extravagant claims that are sometimes made for these products.

The pharmacist could well be put in charge of purchasing all surgical instruments and of keeping an accurate inventory of them. His business contacts will have given him sufficient experience and training so that he can take charge of the purchase of many supplies.

The pharmacist of today has had a thorough training in bacteriology and could take charge of all disinfecting that has to be done, including the disinfecting of clothing and rooms. He also could take charge of all sterilization because he has received a much more thorough training in bacteriology than is given in the usual nurses' course. From the standpoint of economy the trained pharmacist could make his services valuable in many ways.

In the event the foregoing statements may appear theoretical and impractical to some persons, I wish to point out that many large city hospitals have learned the value of the services that the pharmacist can render and have added him or her to the managing staff of the hospital. Smaller hospitals, at least those of 100 or more beds, will find it economical to utilize completely the services of the pharmacist.

Where will the young graduate in pharmacy obtain the necessary practical experience to prepare him for the assumption of the important duties outlined? The colleges of pharmacy prepare these young men and women for the practice of their profession and give them a thorough basic training in chemistry, physiology, bacteriology and pharmacology, but they still must obtain necessary practical experience before they are ready to take charge of a hospital pharmacy. They will not obtain this special experience in the average drug store or even in the ordinary professional pharmacy. Therefore, an apprenticeship in a hospital pharmacy is necessary.

Some of our colleges of pharmacy are awakening to the value to their students of a good course in hospital pharmacy and a thorough course in small production manufacturing and are offering such courses. However, many of our pharmacy colleges have not yet seen fit to prepare part of their graduates for hospital practice and, therefore, there are but few such specially trained pharmacists graduated each year.

To supply the demand for well-trained practical hospital pharmacists, it would seem wise for those hospitals that have this phase of their work well developed to offer apprenticeships to our pharmacy graduates who are interested in becoming hospital pharmacists. This is especially needed in the case of young women graduates. They make splendid hospital pharmacists and are usually more interested than are the young men in this type of professional work.

If the hospitals that are prepared to give good practical training will offer these women maintenance,

The author is dean of the school of pharmacy, Purdue University.

room, board, laundry and sufficient salary to permit them to live economically yet comfortably, the hospitals will be more than paid by the services that the apprentices can give. At the same time the hospitals will be rendering a real service to medical practice.

Six months or a year of such practice should prepare these young people for excellent service in other hospitals. Every year the Purdue University School of Pharmacy is requested to recommend graduates for hospital pharmacy and every year it is compelled to say frankly that it has thoroughly trained pharmacists but none that has had practical experience in the special duties of hospital pharmacy. I am sure that every other college of pharmacy has similar experiences.

This question has confronted the Purdue School of Pharmacy so often that it is going to organize a course in hospital pharmacy; however, it is anticipated that the graduates of this course will still need a few months of apprenticeship. I feel safe in saying that the managements of those hospitals that will offer such apprenticeships will feel amply repaid.

The need is here and the hospitals can render a real service to medical practice by offering pharmacy apprenticeships to promising graduates.

Pharmacy Safeguards

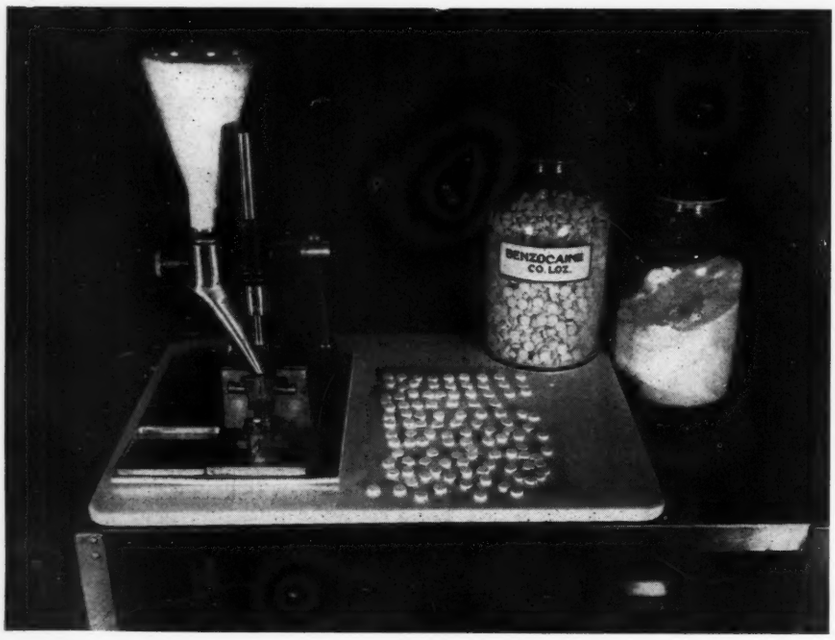
JUDA LERCHER

THE measures employed at the Montefiore Hospital, New York, for safeguarding the contents of the pharmacy may or may not be applicable to pharmacies generally. No attempt is made in this article, therefore, to standardize the procedure. It is rather an outline of the methods we employ that have been found successful. The size and location of the institution, the location of the pharmacy within the institution and other factors naturally increase or reduce the number of safeguards provided in a particular institution in order adequately to protect its contents.

It must be borne in mind that the value of the material is not the primary consideration. There are narcotics and alcohol that must be accounted for to the government; combustible material that represents a dangerous fire hazard, and quantities of poisonous drugs which, if stolen and used improperly, would place the institution in a precarious position. Such material must be locked in a secure place and the temptation to use it illegally removed.

Our pharmacy is comparable to a bank and its fireproof vault, to that of the bank's safe-deposit boxes. The pharmacy is located in the center of a group of buildings. It is a vulnerable spot in the institution and must be adequately protected. The windows are fitted with iron bars and, in addition, protected with a heavy iron mesh. Doors are of substantial construction, equipped with double dead locks; the glass portion is protected with iron mesh. The general appearance is thus sacrificed to afford additional protection. Valuable drugs, poisons and other hazardous materials are stored in metal cabinets equipped with strong doors and stout locks. Capsules, tablets, suppositories and mixtures containing narcotics are also stored in these cabinets. Narcotics in the original packages are stored in a steel safe provided for the purpose. Combustible material, alcohol, whisky and a number of other pharmaceutical items in bulk form are stored in a fireproof vault.

Mr. Lercher is chief pharmacist at Montefiore Hospital, New York.



Above: Capsules are kept fresh by being stored in sealed air-tight jars. Left: An automatic power driven machine used by the pharmacist for the manufacture of various types of pills and tablets.

Form 115 R-L

MONTEFIORE HOSPITAL

Requisition for Narcotics

Ward _____ Date _____ 193

	Oral Use	Quantity Requested	Hypodermic Use	Quantity Requested
Morphine Sulphate Sol.	4CC. = 0.016	C.C.	0.6 = 0.016	C.C.
" " "	4CC. = 0.008	C.C.		
" " Tab.	Gm.	No.	Gm.	No.
Codeine Phosphate Sol.	4CC. = 0.016	C.C.	0.6 = 0.016	C.C.
" " Tab.	Gm.	No.	Gm.	No.

Tincture Opium _____ C. C. _____

Solution Cocaine _____ % C. C. _____

Miscellaneous _____

_____ M. D.
Resident

After the pharmacy is officially closed for the day, access to it can be gained only by permission from the office of the director. The night superintendent of nursing must accompany the person admitted. Cleaning is done during the day in the presence of a member of the pharmacy staff. A device is attached to the doors that indicates to the pharmacist whether an entrance has been made during the night. A watchman's station is placed at the door of the pharmacy and hourly inspections are made during the night.

Considerable loss may be sustained through improper or inadequate storage facilities. At Montefiore Hospital many items of a hygroscopic nature, which might be affected by excess moisture, are stored in tightly corked glass bottles or in sealed metal tins. Ample refrigeration is provided. Capsules, of which we use great quantities, are stored in air-tight sealed jars. Materials affected by light, which are to be kept for long periods of time, are stored in colored glass containers or flint glass jars that are covered with a coat of black paint. All bottles and containers are inspected periodically to determine whether the reading or markings are intact. When necessary they are relettered or relabeled. Whenever practicable, we preserve the original label by varnishing over it as soon as it is received and before it is defaced. Medications returned from the wards are carefully inspected and, if found in good condition, are returned to the original bottles.

Our stock is kept at a minimum, consistent with our needs. With the cooperation of the visiting and house staffs we are able to keep down the inventories of both active and inactive materials.

The equipment of the pharmacy must be kept in a good state of repair so that it is ready for use at any and all times. We have a number of modern devices, such as an automatic power driven tablet machine, power driven ointment mill, autoclave, tablet triturate molds and Berkefeld filters. This mechanical equipment is inspected and repaired periodically by our engineering department and all worn parts are promptly replaced. Suitable glass or leather covers are provided for the machinery.

The hospital pharmacist should be thoroughly conversant with the laws and regulations covering the use of narcotics and alcohol. Ward requisitions for narcotics are signed by the resident physician. When delivered to the wards narcotics are signed for by the nurse in charge and the receipts are filed in the pharmacy. The quantity of narcotics used in the manufactured preparations are recorded also so that the total withdrawn from stock is accounted for. The perpetual inventory of alcohol and liquor is checked against the physical inventory periodically.

The hospital pharmacist should be a person of integrity with a keen appreciation of the needs of the institution and its charges. He should cooperate with the visiting staff of the hospital yet be watchful of the excessive use of costly drugs or of new fads and fancies. The budget must be safeguarded, too, while giving the patient all that he can reasonably need.

Fire fighting apparatus should be plentifully supplied and its various uses should be well known to each member of the pharmacy staff.

"Emergencies" Eliminated

Like most administrators, I was vexed by the continuous opening of the pharmacy at night. I tried to control this by a variety of procedures, such as putting the key in the hands of the night supervisor and forbidding her to let anyone else unlock the door. This only resulted in irritation and bitterness on the part of the resident staff, who felt that it was being unjustly accused of rifling the pharmacy supplies. No matter what procedure was attempted, it resulted in a feeling of resentment on the part of the resident staff.

Finally, I had the happy thought to lock the pharmacy at 5 p.m. and take away all keys so that no one could unlock it until the next day. Then I announced at a staff meeting that it was up to the attending men and the residents to see that their orders appeared before 5 o'clock. If orders came in after that hour, the night supervisor would call up our local pharmacy and order the prescription.

The charge for this service would not only be considerably higher than the hospital charge but there would be added to it the fee for messenger service.

This system has had the effect of cutting down so-called "emergency" orders most amazingly, and from a nightly requirement they have shrunk to three or four orders a month from the downtown pharmacy. As a result, the problem no longer exists.—N. A. WILHELM, *superintendent, Butterworth Hospital, Grand Rapids, Mich.*

WHY #3

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FOR CONSTIPATION

Does not coat intestinal mucosa. Petrolagar is an aqueous suspension of mineral oil — oil in water emulsion.

1. Petrolagar is more palatable. Easier to take by patients with aversion to plain oil—may be thinned by dilution.
2. Miscible in aqueous solutions. Mixes with gastro-intestinal contents to form a homogeneous mass.
4. No accumulation of oil in folds of mucosa.
5. Will not coat the feces with oily film.
6. Does not interfere with secretion or absorption.
7. Augments intestinal contents by supplying an unabsorbable fluid.
8. More even distribution and dissemination of oil with gastro-intestinal contents.
9. Assures a more normal fecal consistency.
10. Less likely to leak.
11. Provides comfortable bowel action.
12. Makes possible five types of Petrolagar to select from to meet the special needs of Bowel Management.

Petrolagar — Liquid petrolatum 65 cc. emulsified with 0.4 Gm. agar in a menstruum to make 100 cc.

Petrolagar

Petrolagar Laboratories, Inc. • 8134 McCormick Boulevard • Chicago, Ill.

NOTES AND ABSTRACTS

By Carl C. Pfeiffer, M.D., Department of Pharmacology
University of Chicago

• Choosing a Barbiturate

The number of barbiturates at present on the market causes a good deal of confusion in choosing the proper drug for each immediate purpose. The classification of Tatum and his coworkers at Wisconsin is of value in selecting the particular type needed. The sedation and hypnosis of the usual oral doses when given to the normal human being are as follows: phenobarbital, from two to four days; barbital, from twenty-four to forty-eight hours; butylethylbarbituric acid, diallylbarbituric acid, allylisopropylbarbituric acid and ipral, from ten to twelve hours; isoamylethylbarbituric acid, from five to eight hours, and pentobarbital and cyclohexenyl ethyl barbituric acid, from three to six hours.

Because of the many barbiturates available there is no reason to give one that has been shown to produce toxic reactions. This applies to those cases in which the toxic reactions occur only in so-called hypersensitive individuals. Four drugs that could be eliminated for these reasons are: (1) allylisopropylacetyl-carbamide; (2) isopropyl bromallyl barbituric acid; (3) allylisopropylbarbituric acid plus amidopyrine, and (4) barbiturate "compounds."

The amidopyrine in the last two compounds makes their use extremely dangerous since Kracke, Madison and Squier have indicated the true toxic depression of the bone marrow characteristic of amidopyrine. A long acting barbiturate may be given the night before an operation to offset local anesthetic stimulation; a short acting barbiturate may be given one hour before an operation for the same reason. When the impotent gases, nitrous oxide or ethylene, are used for major surgery it is advisable to use some preanesthetic depressant. A double dose of a short acting barbiturate will serve the purpose well.

An important hospital combination of barbiturates is phenobarbital and pentobarbital given together. These may be given in a dose of 0.1 gm. each at bedtime. If only pentobarbital is given the patient may acquire psychic addiction to the barbiturate. Almost every depressant drug causes an after-stimulation. This stimulation is greatest after the deep depression resulting from the short acting barbiturates. The sedative action of phenobarbital, which lasts for from 2 to 4 days, minimizes the after stimulation of the short acting barbiturates.

• Barbiturate Poisoning

Paralleling the increased popularity of the barbiturates as sleep producers in the centers of population, they have become increasingly popular as suicidal agents. A recent survey ascribes 17 per cent of the suicidal deaths in Boston to barbiturates.

The initial step in the treatment of barbiturate poisoning, as with all poisonings, is to remove the stomach contents by gastric lavage. This prevents the absorption of any more barbiturate. The stomach contents should be saved in a clean jar in case chemical examination is later necessary. The patient, if comatose, may be given from 10 to 20 mgm. of picrotoxin intravenously with safety. Ten per cent dextrose (100 to 500 cc.) to which has been added 1 mgm. of picrotoxin per 2 cc. of solution may then be given intravenously by the drip method. The patient must be watched and the intravenous drip should be discontinued at the first sign of muscular twitching or awakening. Picrotoxin has a latent period from five to ten minutes before attainment of its full analeptic power and if the patient is not watched convulsions may develop. Some patients may require as much as 1.0 gm. of picrotoxin. The 10 per cent dextrose aids kidney function, which is inhibited during barbiturate narcosis, and tends to prevent cerebral edema, which is a contributing factor in barbiturate deaths. The picrotoxin treatment is most effective against the short acting barbiturates.

Metrazol is almost equally effective and, although it may be given by syringe symptomatically, it must be repeated oftener since its duration of action is much shorter. The usual symptomatic supportive treatments, such as artificial respiration and oxygen therapy, are given if indicated and the patient should be turned frequently to prevent hypostatic pneumonia.

• "Dilantin"

Putnam and Merritt, working in Boston, have published the results of their studies on anticonvulsant drugs. These workers used graded electrical stimuli and determined the threshold cerebral stimulus needed to produce convulsions in the cat. Their first report was to the effect that by their method phenobarbital was more effective than bromides in preventing convulsions. This checked with the known clinical facts and served to indicate the validity of their experimental method.

In a more recent publication they stated that sodium diphenyl hydantoinate was more effective than phenobarbital. This substance is now having extensive clinical trial in authorized clinics. The drug produces some skin rashes and, according to Kimball working in Cleveland, it increases the vitamin C requirements. The drug in adequate doses of 0.3 to 0.6 gm. per day is more effective than phenobarbital in controlling major and minor convulsions. It is still in the experimental stage, however.

Sulfapyridine in Pneumonia

Sulfapyridine, which was first introduced by Whitby in 1938, has subsequently had wide trial both in England and in the United States. In the treatment of type III pneumococcus pneumonia, the drug has been found to be extremely efficacious.

An initial dose of 2 grams is given, followed by 1 gram every four hours night and day. By such a dosage it is possible to maintain a fairly constant and adequate concentration of the drug in the blood. The determination of such a level is carried out by the Marshall method, as originally proposed in the determination of blood sulfanilamide. Some authors are of the opinion that the action of the drug is enhanced when given together with type specific antipneumococcus serum.

The drug exerts direct influence on the pneumococcus so that further growth is inhibited; however, as far as can be determined, it has no bacteriocidal effect.

The usual mortality in type III pneumococcus pneumonia is approximately 40 per cent. With the use of sulfapyridine the mortality has been reduced to from 3 to 4 per cent.

The only toxic effects of the drug so far noted have been nausea, vomiting, mild cyanosis and, in isolated cases, hemolytic anemia, dermatitis medicamentosa and, in rare instances, renal lithiasis.

There is no doubt that sulfapyridine is a life-saving drug and probably represents the greatest advance of the era in the treatment of pneumococcus pneumonia. — Edgar A. Lawrence, M.D.

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Vol 52 June 1939 No. 6

A.M.A. Delegates Condemn National Health Bill at St. Louis Meeting

The American Medical Association, meeting in St. Louis the middle of last month, condemned the proposed Wagner National Health Act and declared that the subsidies provided by the act would lead to federal control of state and local health programs. The report adopted by the house of delegates stated that the association did not in any way repudiate the principles adopted at the special session of the house in 1938.

In its condemnation of the Wagner Bill, the association stated that the bill recognizes neither the spirit nor the text of the resolutions adopted by the association at the special session, that it does not safeguard the continued existence of private practitioners or of church and community general hospitals. The bill proposes to make federal aid for medical care the rule rather than the exception by using the grant-in-aid principle, thus "insidiously promoting the development of a complete system of tax supported governmental medical care," the association stated.

The association was particularly incensed by the grant-in-aid system, which, it said, was the result of "bizarre thinking." As an alternative, the delegates suggested that "any state in actual need for the prevention of disease, the promotion of health and the care of the sick should be able to obtain such aid in a medical emergency without stimulating every other state to seek and to accept similar aid and thus to have imposed on it the burden of federal control. The mechanism by which this end is to be accomplished must be developed by the Executive and the Congress, who are charged with these duties."

Another complaint against the bill was that it made no provision for suitable food, housing and "other environmental conditions necessary to the continuous prevention of disease."

The association pointed out that the bill proposed to provide complete medical service in addition to cash benefits to replace wage loss and declared that the fortunate health conditions now prevailing in this country "cannot be disassociated from the prevailing standards and methods of medical practice."

The association pointed with pride to its own contribution and that of the medical profession as a whole in the advancement of public health and urged the development of a mechanism for meeting the needs for expansion of preventive medical services, extension of medical care for the indigent and medically indigent "with local determination of needs and local control of administration, within the philosophy of the American form of government and without damage to the quality of medical service."

Executive Housekeepers Will Hold Congress in Pittsburgh

Thursday, June 1, will be hospital day at the sixth annual congress of the National Executive Housekeepers Association, in Pittsburgh, June 1 to 4. The speaker of the day will be Edgar C. Hayhow, superintendent of the Paterson General Hospital, Paterson, N. J.

A full program has been arranged for the delegates to the convention, including luncheon and a trip through the Heinz plant and visits to the Allegheny General Hospital, the University of Pittsburgh Cathedral of Learning and the Stephen Foster Memorial. A gala dinner dance and floor show on Saturday night will climax the social side of the meeting.

At the business sessions, new directors are to be elected and changes in the by-laws will be brought up for the consideration of the delegates.

Social Security Exemptions Stand

The committee on ways and means of the House of Representatives has announced its decision that no change will be made in the existing Social Security Act exempting religious, educational and nonprofit organizations from the provisions of the act. The committee has voted to defer any action at this session of Congress.

First Southern Institute for Administrators to Be Held at Duke University

The first southern institute for hospital administrators will open at the Duke University, Durham, N. C., on July 31 and continue through August 11. The institute is sponsored by the American College of Hospital Administrators, the Carolinas-Virginias Hospital Conference and the Southeastern Hospital Conference in cooperation with the University of North Carolina and Duke University. Twelve states are included in the institute area.

The program for the southern institute will follow the general outline used at the Chicago and Stanford institutes but will emphasize the particular needs of hospitals in the South where most of the institutions are comparatively small and located in rural areas and small towns.

Among the speakers scheduled are W. S. Rankin, M.D., director of the hospital section, Duke Endowment, on "The Future of Hospital Administration in the South"; Abraham Oseroff, director of the Hospital Service Association of Pittsburgh, on the "Significance of Group Hospitalization to the South," and Macie N. Knapp, administrator, Brokaw Hospital, Normal, Ill., on "Administrative Problems of the Small Hospital."

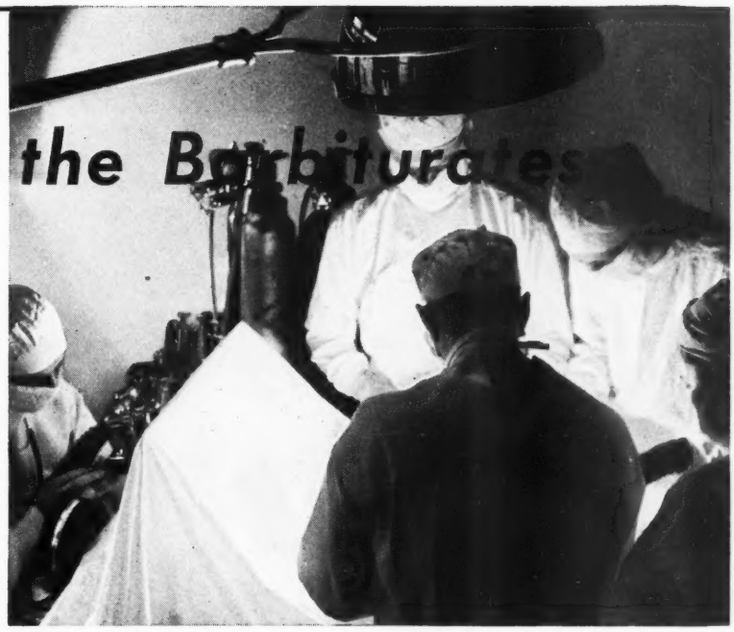
Red Cross Prepares Motion Picture

The American Red Cross has prepared for free distribution a one reel motion picture entitled "Footsteps," which dramatically portrays the training of the Red Cross nurse and the work she performs. The picture illustrates the intensive education given the student with glimpses of lectures, laboratory research, bedside practice and operating room procedure. The film is available free to churches, schools and other organizations.

New Course in Personnel Management

The school of nursing at St. Anthony Hospital, Terre Haute, Ind., has announced a course in hospital personnel management to be given from June 5 to 23. Sister Mary Reginald, R.N., will conduct the course.

Therapy with the Barbiturates



● In surgery, in obstetrics, and in general practice, barbituric acid derivatives have a wide field of usefulness. Prominent among those favorably received by the medical profession are:

AMYTAL (Iso-amyl Ethyl Barbituric Acid, Lilly). Sedative and hypnotic.

SECONAL (Sodium Propyl-methyl-carbinyl Allyl Barbiturate, Lilly). Because of the short duration of the effect of 'Seconal,' the patient remains under constant control.

SODIUM AMYTAL (Sodium Iso-amyl Ethyl Barbiturate, Lilly). Hypnotic and anticonvulsant.

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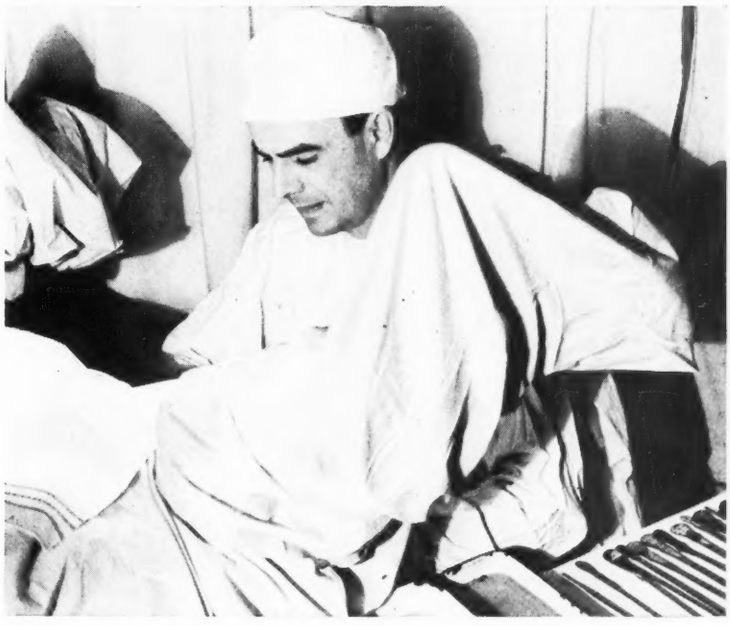

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National Hospital Day Observed at World's Fairs and Everywhere

A dramatization of the life of a living hospital administrator, special events at each of the World's Fairs, a governor speaking in favor of socialized medicine, and a prominent political spokesman speaking against any change in medical practice were some of the features of National Hospital Day, 1939 model.

The Iowa Hospital Association put on the dramatization of the life of Mrs. Emma Lucas Louie, the oldest active hospital administrator in the nation. Mrs. Louie was 86 years old last fall and has been in continuous charge of the Jennie Edmundson Memorial Hospital at Council Bluffs for fifty-three years. The dramatization of Mrs. Louie's rôle in the growth of the Jennie Edmundson was prepared by a group of University of Iowa students of speech and was presented over station WMT, Cedar Rapids. Unfortunately Mrs. Louie was ill at the time of the broadcast but a recording was made and rebroadcast by a Council Bluffs station for her benefit.

At Paradise Valley Sanitarium and Hospital, National City, Calif., Governor Olson was scheduled to speak. He was unable to attend but sent a representative who delivered his speech urging the passage of a bill for compulsory health insurance now before the California legislature. The governor also was scheduled to unveil a statue of Florence Nightingale on Treasure Island at the Golden Gate Exposition. Other addresses at the exposition were made by the British counsul-general; Gertrude Folendorf, president of the California Nurses' Association, and Dr. Benjamin W. Black, past president of the Association of Western Hospitals. A special feature of the event was a showing of a new version of the color film, "Behind the Scenes in a Modern Hospital." This film was produced by George U. Wood of Peralta Hospital, Oakland.

The statue of Florence Nightingale, which was unveiled by Governor Olson, was presented to the city of San Francisco and accepted by Dr. J. C. Geiger, director of health. Inscribed on the statue are the following words:

"Of the vast throng passing from the mystery of birth to the mystery of death, certain ones so live that their deeds become impressed upon the memory of the race. Among these we name Florence Nightingale, whose life has been, is today and will ever continue to be a mighty influence against man's cruelty to man. To her memory, this statue symbolizing the protection of the flame of life is dedicated and to all those following in her footsteps in the care of the sick."

Speaking at the ceremonies of the Hinsdale Sanitarium and Hospital, Hinsdale, Ill., Homer E. Capehart of Washington, Ind., urged that doctors and nurses should never "be regimented and controlled through professional partisan politicians by our federal government."

Another feature of popular interest of the Hinsdale celebration was the planting of a tree dedicated to Matthew O. Foley, founder of National Hospital Day. His son C. J. Foley unveiled the plaque marking the tree.

At the New York World's Fair an oak sapling from the old home of Miss Nightingale at Embley Park, England, was planted in the British Pavilion with Lady Lindsay, wife of the British ambassador, officiating. Among the speakers were Sir Louis Beale, chairman of the foreign commissioners to the fair; Mrs. Ethel G. Prince, president of the New York State Nurses' Association; Annie Goodrich, dean emeritus of Yale University School of Nursing, and John H. Hayes, president of the New York State Hospital Association.

A pageant directed by the nurses displayed the evolution of nurses' uniforms from the day of the Crusaders. The oak sapling was a gift of Mr. and Mrs. J. J. Crosfield, present owners of the Florence Nightingale estate.

An international radio broadcast on May 11 featured Dr. G. Harvey Agnew, president of the American Hospital Association.

100,000 Members in Hospital Plan

The nonprofit group hospitalization movement in western Pennsylvania has announced the enrollment of its hundred thousandth member.

West Virginia Association Welcomed Into Carolinas-Virginia Hospital Group

The Carolinas-Virginia Hospital Conference became the Carolinas-Virginias Hospital Conference at its annual meeting in Roanoke, Va., April 20-22, by the inclusion of the West Virginia Hospital Association as the fourth member of the group. Another highlight of the meeting was the adoption of the Virginia association of the model constitution and by-laws recommended by the American Hospital Association, through which the Virginia members will also become members of the A.H.A.

New officers of the four state associations are as follows:

Virginia: W. N. Walters, administrator, Lewis-Gale Hospital, Roanoke, president; Dr. Arthur H. Perkins, administrator, Norfolk General Hospital, Norfolk, vice president; M. Haskins Coleman Jr., Richmond, secretary, and W. L. Beale, Richmond, treasurer.

West Virginia: T. Harvey McMillan, Charleston, president; Dr. T. L. Harris, Parkersburg, president-elect; Sister M. Carola, Charleston, vice president, and C. F. Runyon, administrator, Charleston General Hospital, Charleston, secretary-treasurer.

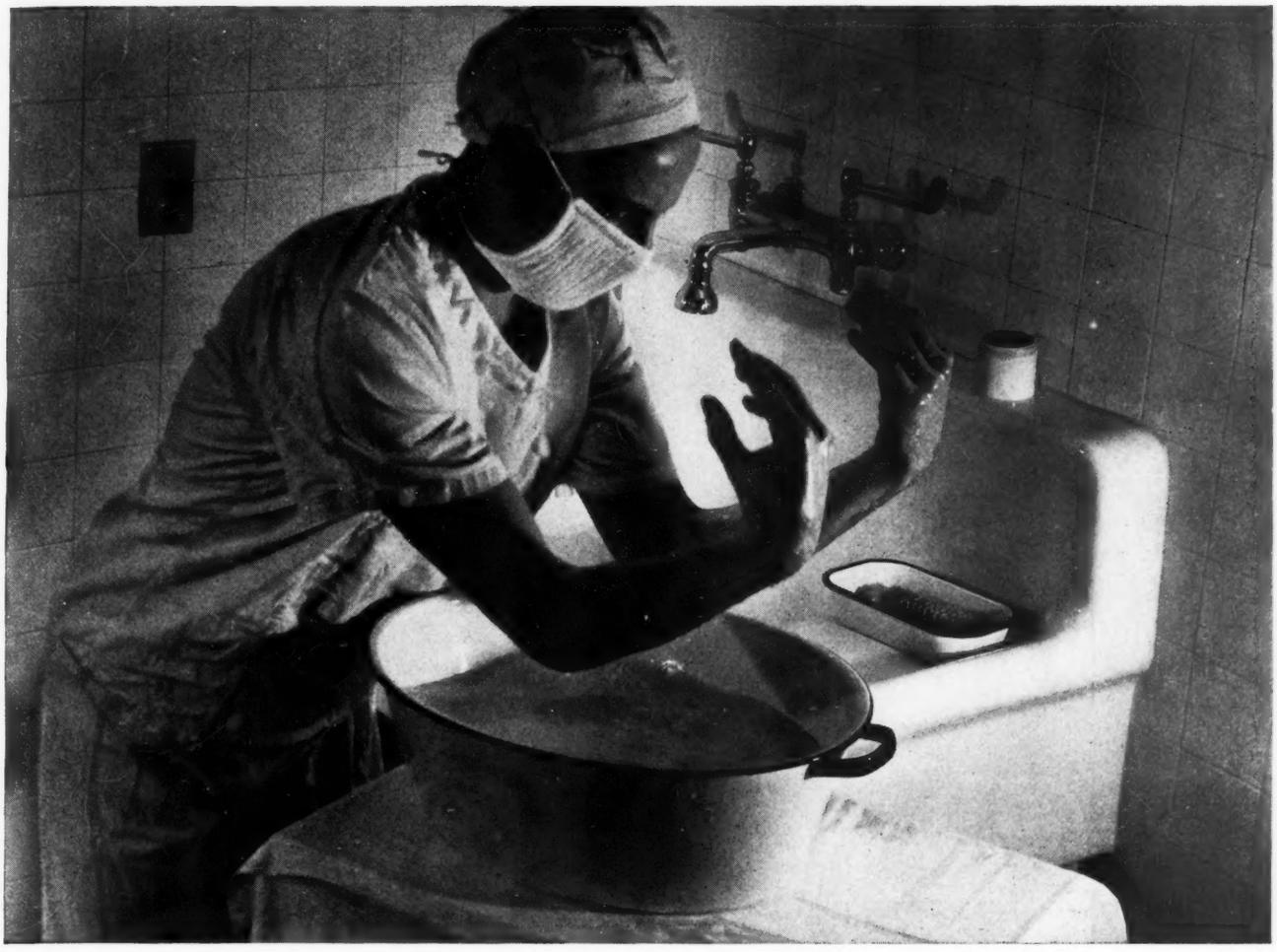
South Carolina: Charles H. Dabbs, administrator, Tuomey Hospital, re-elected president; W. A. Cooper, administrator, Tri-County Hospital, Orangeburg, president-elect; James L. Rogers, administrator, Spartanburg General Hospital, Spartanburg, vice president, and H. H. McGill, administrator, Columbia Hospital, Columbia, secretary-treasurer.

North Carolina: Dr. Vance Peery, Kingston, president; Dr. Fred H. Hubbard, North Wilkesboro, vice president, and S. B. Forbus, administrator, Watts Hospital, Durham, secretary.

Hospital Plan Membership Rises

The quarterly report of the commission on hospital service of the American Hospital Association on enrollment figures for the hospital care plans throughout the country indicated a total of 3,463,230 subscribers. The four plans that have the largest number of subscribers are the Associated Hospital Service of New York, with 1,210,866; the Minnesota Hospital Service Association, 269,380; Associated Hospital Service of Massachusetts, 165,748, and the Hospital Service Plan of New Jersey, 128,354.

NO. 6 OF A SERIES OF ADVERTISEMENTS SHOWING WHERE U.S.I. ALCOHOL IS USED IN HOSPITALS



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You can answer "Yes" if they follow soap and water scrub-up with immersion of hands and arms in a 70% solution of U.S.I. ethyl alcohol.

Leading American hospitals have standardized on this technique because each minute's immersion in U.S.I. alcohol has a degerming action which adds to the effectiveness of scrubbing. These hospitals specify U.S.I. ethyl alcohol not only because they have found it best for surgical scrub-up, but because it is safe for the pharmacy, for sterilizing costly instruments, for alcohol nerve block, in fact, for any purpose where only the purest ethyl alcohol will do.

U.S.I. alcohol is full-strength. Every shipment is checked for acidity, fusel oil constituents, aldehydes, and other organic matter to insure purity.

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Health Program, Nursing Problems Discussed at Pennsylvania Meeting

If attendance figures at the eighteenth annual conference of the Hospital Association of Pennsylvania proved somewhat disappointing, there was adequate compensation in the enthusiastic response of members of the association and guests to the well-balanced program offered by President John A. Hatfield, administrator of the Pennsylvania Hospital, and his associates. To those hospital people who came to hear and to join in discussions of challenging problems were added substantial numbers of trustees for whom an entire day was planned. In trustee attendance at least, the meeting was a record breaker.

As might be expected, the implications of the impending National Health Program upon voluntary hospitals were seriously considered, and this constituted the greater part of one afternoon's program. Dr. Joseph W. Mountin, a member of the President's technical committee on medical care, outlined the program first revealed nearly a year ago which, although not yet a reality, has been incorporated in part into bills now pending. While emphasizing existent deficiencies in hospital service to the population as a whole, Doctor Mountin made clear the need for coordinating voluntary hospital service with that proposed under government auspices.

The voluntary hospitals, for their part, are generally favorable to the proposals of the National Health Program, Dr. Harvey Agnew, president of the American Hospital Association, explained, in discussing Doctor Mountin's statement. "At the same time," he added, "they are not unmindful of the potentialities for disintegration of the voluntary system in certain of the proposals, realizing the possibility of unnecessary competition, of needless and wasteful expenditure and of undesirable interference and bureaucracy."

Dr. Joseph C. Doane, medical director, Jewish Hospital, and editor of The Modern Hospital, also discussed the challenge to be found in certain of the proposed recommendations. He urged the survival of the voluntary hospital system as typifying the American way and condemned any influences to break the bond that exists between the community hospital and those it serves.

Among those issues discussed in a conference of nursing problems was the eight hour day. According to Mary A. Rothrock, president, Pennsylvania State Nurses' Association, "too many hospitals still permit their patients to be served by nurses who attempt to carry the load from twelve to twenty hours out of twenty-four. The eight hour day for nurses is an inevitable occurrence."

At the same meeting, a tuition fee for student nurses was advocated for Pennsylvania hospitals. "If our students are to receive an excellent nursing education," Dr. John L. Davis, superintendent, Meadville City Hospital, said, "we are going to give more than we receive unless we receive tuition or a state subsidy."

The term "hospital" has taken on a new meaning, according to Dr. Robin C. Buerki, president of the American College of Administrators, in speaking of the place of the hospital in graduate medical education. "Are we doing the job we should be doing in medical education?" he inquired, adding that hospitals today must meet not only the health services of the community but the educational requirements as well and must offer multitudinous types of training by which to serve the patient more efficiently.

Engineering problems pertaining to the efficient operation of the hospital plant were likewise considered. Problems of hospital service plans operating in Pennsylvania were studied in a forum on group hospitalization.

The following officers were elected: Major Roger A. Greene, superintendent, Pottsville Hospital, president; Ray B. Hall, superintendent of Lancaster General Hospital, first vice president; Sister Baptista, superintendent of St. John's General Hospital, Pittsburgh, second vice president, and Elmer E. Matthews, superintendent of Wilkes-Barre General Hospital, treasurer.

The directors named were as follows: John Hatfield, superintendent, Pennsylvania Hospital, Philadelphia; Edith B. Irwin, superintendent, Westmoreland Hospital, Greensburg, and Dr. Percy L. Jones, superintendent, Hamot Hospital, Erie.

Meeting with the hospital group was the Pennsylvania Association of Nurse Anesthetists, which observed its eighth annual conference; also the Pennsylvania Physiotherapy Association and the Pennsylvania Association of Medical Record Librarians, which held their first annual conferences. Members of these groups and the hospital administrators comprised a substantial audience for the exhibitors whose products, both new and old, met with the usual enthusiastic response.

Mellon Institute Develops Meat Tenderizing Process

A new rapid process of tenderizing beef developed by the Mellon Institute of Industrial Research was demonstrated at the Institute in Pittsburgh recently.

Essentially, the process consists of maintaining a high humidity in storage cabinets to prevent shrinkage, maintaining a high temperature to permit the enzymes to transform the connective tissue from muscle fiber into gelatin and subjecting the meat to ultraviolet irradiation to prevent the formation of mold and bacteria. Without irradiation, bacteria and mold will grow rapidly in an atmosphere of 85 to 90 per cent relative humidity and 60° F. temperature.

Advantages claimed for the tenderized beef are increased juiciness, uniform tenderness, retention of natural flavor and elimination of any material loss of vitamins or other essential food substances. The general effect is said to be to raise the beef approximately one grade in palatability.

Buffalo Hospital Renamed

The renaming of the Buffalo City Hospital, Buffalo, N. Y., as the Edward J. Meyer Memorial Hospital was marked by dedication ceremonies held on April 20 under the auspices of the Medical Society of the County of Erie, the Buffalo Academy of Medicine and the consulting, visiting and resident staffs of the hospital. The late Doctor Meyer was for many years president of the hospital board. Speakers at the dedication included Kenneth Goodner, Ph.D., of the Rockefeller Institute for Medical Research, New York, who discussed the newer aspects of pneumonia, and Dr. Carlton E. Wertz, who reviewed the life of Doctor Meyer.

Hospital Plan Moves Offices

The Group Hospital Service, Inc., of St. Louis has moved its offices to new and larger quarters at 3607 Olive Street. The move was necessitated by the increased enrollment of subscribers, which on May 1 reached the total of 76,000.

Tri-State Assembly Attracts Crowd of 3200; Dr. MacEachern Is Honored

Improved relations between governmental agencies and hospitals especially as they concern the care of the indigent patients, wider use of color in operating rooms to aid the surgeon's vision, more careful checking of cross-infections, better education of hospital administrators, new developments in anesthesia, improvements in public relations and scores of similar subjects were discussed at the meeting of the Tri-State Hospital Assembly which brought together in Chicago more than 3200 hospital people from Indiana, Illinois, Wisconsin and Michigan on May 3, 4 and 5.

The meeting was the largest in the history of this rapidly growing organization. An unusual feature was the presentation of a hand illuminated testimonial and a ticket for a trip to Europe to Dr. Malcolm T. MacEachern for his untiring services as chairman of the program committee of the organization. Two new sections were started, one on public relations and one on hospital construction, thus bringing the total number of sections to 22. Almost every department of hospital activity is now represented in the assembly.

Dr. G. Harvey Agnew, president of the American Hospital Association, opposed both the reactionaries and the radicals in medical economics. The solution of the problem lies in the greater allocation of public funds to approved voluntary institutions for the care of the poor and the extension of voluntary hospital and medical care insurance plans to enable self-suporting people to pay their own bills, Doctor Agnew declared.

Tomorrow's operating room gowns for doctors, nurses and patients may be light greens, blues and blue-greens. Light-absorbing colors for the operating room were recommended by Dr. William J. Engel of the Cleveland Clinic.

Reporting on a study of operating room lighting conditions made during more than fifty operations covering most of the major surgical procedures, Doctor Engel found that white drapes on the patient and attendants had a high reflection factor which produced glare, with resultant eye fatigue for the surgeon.

Use of free medical and hospital care facilities already available through voluntary clinics and education of near indigents to budget for family medical needs were urged by Dr. Rollo K. Packard, president of the Illinois State Medical Society and chief surgeon at Woodlawn Hospital, Chicago.

Studies made by the Chicago Medical Society's committee on medical economics indicate that 14 per cent of patients now receiving free care in Cook County are able to pay something for their care, if proper budgeting measures are instituted.

Governmental subsidy for indigent care in existing voluntary institutions is a more rational approach to the problem of medical care for the poor than the construction of new government institutions, it was declared in an address by Dr. Peter D. Ward, superintendent of Charles T. Miller Hospital of St. Paul. A per diem rate paid to these hospitals by the government need not include amortization and depreciation costs, according to Doctor Ward, who urged cooperation between government and voluntary groups to work out a fair method of subsidizing free care for the indigent.

Officers elected by the various state associations are as follows:

Michigan: president, Mrs. Kate J. Hard, Saginaw General Hospital, Saginaw; president-elect, Dr. E. F. Collins, Grace Hospital, Detroit; secretary-treasurer, Robert Greve, University Hospital, Ann Arbor.

Indiana: president, Earl C. Wolf, Indianapolis City Hospital, Indianapolis; president-elect, Nellie G. Brown, R.N., Ball Memorial Hospital, Muncie; secretary, Albert G. Hahn, Deaconess Hospital, Evansville.

Illinois: president, Stuart K. Hummel, Silver Cross Hospital, Joliet; secretary-treasurer, Charles A. Lindquist, Sherman Hospital, Elgin.

Preventive Health Care Predicted

Addressing the annual meeting of the women's committees of the United Hospital Fund, David H. McAlpin Pyle, president of the fund, predicted that hospital service will advance from the present curative state into a protective health service. Mr. Pyle emphasized the need for attention to the social service aspects of hospital service. H. V. Kaltenborn, writer and commentator, who also addressed the meeting, stated that the principle of collective security is as important to the hospital field as it is to the world generally and prophesied that it was the one principle that nations of the world eventually would accept.

Children's Home Adds 30 Beds

Through the acquisition of a new building opened only a short time ago, the Children's Country Home, Westfield, N. J., has added 30 beds to its original capacity of 42. Among the new units recently installed are a fully equipped hydrotherapy department, a physiotherapy department and an occupational therapy department. A new tank was the gift of the women's auxiliary. Cora Gould is superintendent of the home.

Provides Life Insurance for Employes

The Chicago Home for Incurables has adopted a group program that will provide more than 100 employes with a total of approximately $75,000 worth of life insurance. The plan is being underwritten on a cooperative basis whereby the institution and the employes share the cost. The individual life insurance benefits range from $500 to $1500. Also included in the plan are visiting nurse care and the periodical distribution of pamphlets on health conservation and disease prevention.

Coming Meetings

June 1-4—National Executive Housekeepers Association, William Penn Hotel, Pittsburgh.

June 8-10—New Jersey Hospital Association, Hotel Dennis, Atlantic City, N. J.

June 12-16—Catholic Hospital Association, Milwaukee Auditorium, Milwaukee.

June 15-17—Institute for Directors of Schools of Nursing, University of Chicago, Chicago.

June 18-24—American Association of Medical Social Workers, Buffalo, N. Y.

June 22—Manitoba Hospital Association, Winnipeg, Man.

June 25-28—American Sanatorium Association, Boston.

June 29-30—New Brunswick Hospital Association, Mount Allison University, Sackville, N. B.

July 31-Aug. 12—Southern Institute for Hospital Administrators, Duke University, Durham, N. C.

Aug. 13-15—National Hospital Association, New York City.

Aug. 27-Sept. 1—American Dietetic Association, Ambassador Hotel, Los Angeles.

Sept. 5-8—American Congress of Physical Therapy, Hotel Pennsylvania, New York City.

September 5-16—Institute for Hospital Administrators, University of Chicago, Chicago.

Sept. 11-15—American Congress on Obstetrics and Gynecology, Cleveland.

Sept. 19-23—International Hospital Association, Toronto, Ont.

Sept. 21-22—Canadian Hospital Council, Toronto.

Sept. 24-25—American College of Hospital Administrators, Toronto.

Sept. 25-29—American Hospital Association, Toronto.

Feb. 22-24—Texas Hospital Association, San Antonio, Tex.

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Quiz, Skits and World's Fair Add Interest to New York Convention

Skits showing both the good and bad sides of hospital administration, round table discussions, and even a quiz appropriately entitled "Inflammation, Please," introduced into the program of the fifteenth annual convention of the Hospital Association of New York State added a welcome variety to the usual convention proceedings. Attendance at some sessions was good; at others, disappointing, the total falling somewhat below that of previous years. This may be attributed in measure to the attractions that New York offers, particularly the World's Fair on Flushing Meadows.

The growing financial problems facing voluntary hospitals and the inadequate compensation granted them by local and state authorities for care of indigent patients were discussed in a general session. It was suggested by Newbold Morris, president of the New York City Council, that Governor Herbert H. Lehman call a conference of the mayors of the various cities to determine what special added tax powers municipalities might have to meet the situation, provided the state is not willing to impose the special taxes itself. Mr. Morris indicated that not much help could be looked for in New York beyond the fact that the present $3 a patient which the voluntary hospitals receive for indigents might be increased to $3.50.

Hospital group insurance in New York City is undergoing revision to meet new demands, with medical groups, hospital administrators and the board of Associated Hospital Service uniting to iron out existing difficulties, according to Frank Van Dyk, Associated Hospital Service. In fact, hospital insurance plans generally are still in a formative stage, C. Rufus Rorem, director of hospital service of the American Hospital Association, pointed out, expressing the opinion that they should not be extended too rapidly until all difficulties have been overcome. Dr. E. C. Podvin, assistant secretary, New York State Medical Association, contended that some form of group insurance providing physicians' services for 70 or 80 of the more common ailments should be devised. He urged that such a plan be worked out cooperatively by hospitals and doctors.

John H. Hayes, retiring president of the association and superintendent of Lenox Hill Hospital, New York, scored all compulsory health programs. "We prefer initiative and philanthropy to regimentation and taxation," he said. "To remove from the American scene the opportunity to do unto others will be retrogression and not progress."

Public relations and personnel problems were among other subjects receiving attention in general sessions. Hospital trustees were invited with their administrators to a special meeting to consider problems of mutual interest. Although the attendance at this session did not fulfill expectations, the manifestation of interest on the part of those present was encouraging.

Supplementing the general sessions. sectional meetings were held devoted to problems pertaining to the pharmacy, housekeeping and engineering departments. Leading these discussions were

(*Continued on page* 126)

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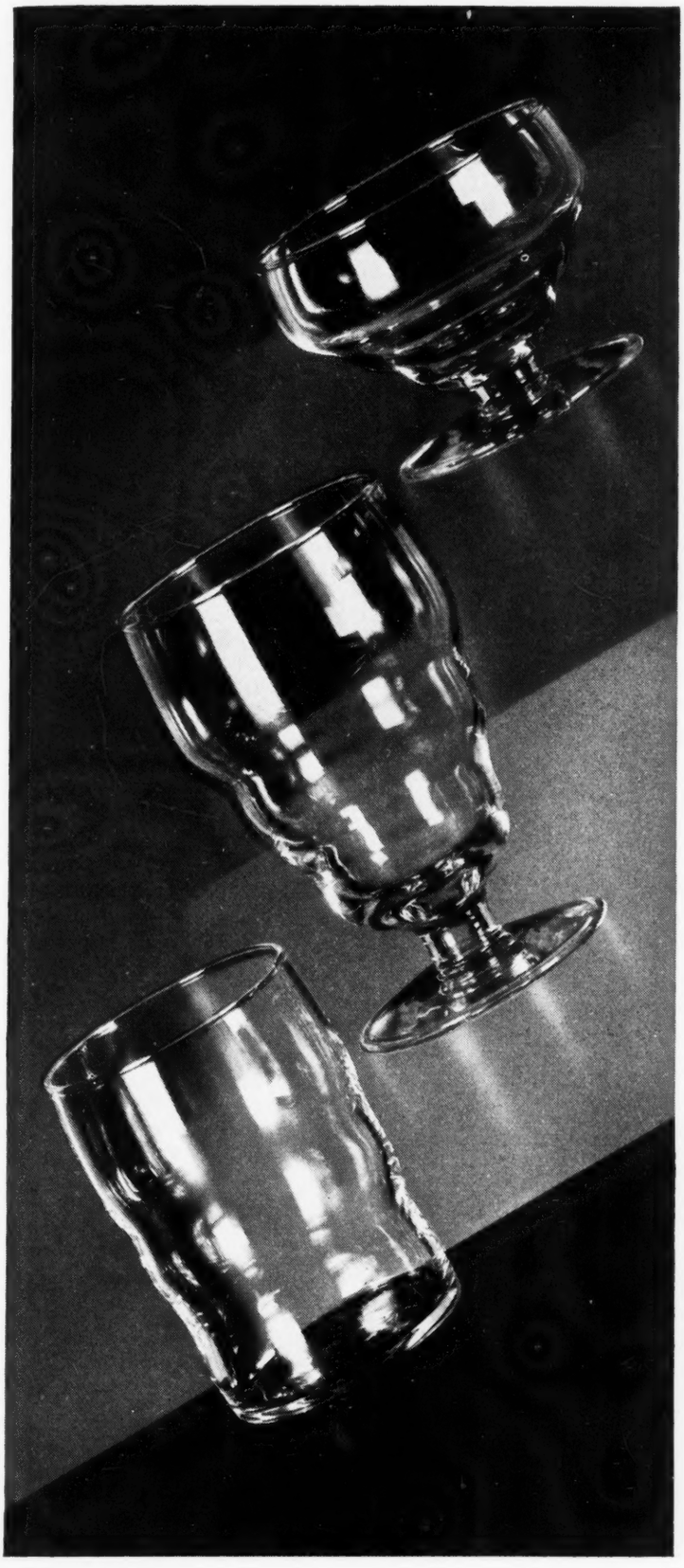

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No. 2654—10 oz. Goblet No. D2610—9½ oz. Water

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Iowa Convention Attracts Some 250; Mrs. Louie Is Given Foley Award

The accrediting program of the National League of Nursing Education will not follow any rigid formula. Each school will be examined on the basis of the character of the school as a whole. Weaknesses in one department may be overcome by exceptional strength in others. If the schools are graduating a fine quality of nurse they deserve and will be given accreditation.

This was the burden of the reassuring talk prepared for the Iowa Hospital Association by Blanche Graves, director of nursing education in Iowa. Unfortunately Miss Graves was not able to be present and her talk was read in her absence.

The social worker's function is to integrate the care of the patient rather than to break it into specialized compartments as so many other specialists do, declared Elizabeth T. Mills, director of the department of social service of the University of Iowa Hospitals. The social worker is a positive factor in the hospital's public relations program, Miss Mills stated, pointing out that she aids greatly in making care effective. The social worker should follow all discharged diabetic, syphilitic, tuberculous and cancer patients, among other groups.

The administrators were advised by Dr. Robin C. Buerki, director of the Commission on Graduate Medical Education and president of the American College of Hospital Administrators, not to have a school of nursing unless it can be a good school. "The same point of view applies to all the other important educational functions of the hospital," he stated. He warned administrators that they must keep themselves up to date so that they will know what good education is for their nurses, interns, residents, student dietitians and other groups. In the future the public must pay a larger proportion of the cost for education of hospital and medical workers, he said, because we cannot add to the patient's bill except in proportion as we improve the quality of care of patients.

A running description of the many activities of the American College of Hospital Administrators was presented by Gerhard Hartman, executive secretary. Mr. Hartman especially mentioned the new evening course in hospital administration to be given next fall at the University of Chicago and the proposed conference of hospital trustees to be held at the University of Chicago.

An interesting outline of his system of professional auditing was presented by Dr. Thomas R. Ponton, editor of *Hospital Management*. The business organization usually dominates in the hospital whereas the professional organization should dominate, he said. Professional accounting based on personal observation and records of original entry on professional services can never be as accurate as business accounting but it can be sufficiently accurate to measure the efficiency of our efforts, Doctor Ponton declared.

More than 250 persons were registered for the Iowa meeting. Rev. J. P. Van Horn, administrator, St. Luke's Methodist Hospital, Cedar Rapids, was chosen as president; Miss I. Craig-Anderson, St. Luke's Hospital,

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Davenport, was elected first vice president, and R. J. Conner, University of Iowa Hospitals, Iowa City, was re-elected secretary.

The Matthew O. Foley award for distinguished service was given to Mrs. Emma Lucas Louie, Jennie Edmondson Memorial Hospital, Council Bluffs. Mrs. Louie has served the Council Bluffs hospital continuously for fifty-three years.

Montana Catholic Conference Meets

The Montana Conference of the Catholic Hospital Association held its annual meeting in Havre, May 4 and 5. General discussion centered around the topic of hospital care insurance plans for the state of Montana. Sister Mercy of Kalispell, Mont., was elected president of the conference.

Massachusetts Doctors Approve Plan

The council of the Massachusetts Medical Society on April 26 authorized the development of a form of voluntary medical care insurance for low income families modeled on the plan of hospital care insurance that is now in existence.

Kalamazoo Institution Concludes Successful Building Campaign

A campaign for $65,000 to supply equipment and furnishings for the projected addition to Bronson Hospital, Kalamazoo, Mich., was recently brought to a successful conclusion with pledges of more than $64,000. An earlier gift of $100,000 from the Kresge Foundation and other gifts of $150,000 from leading local citizens are to be used to construct a new building which will provide greatly enlarged space for the hospital's various departments and will add 50 beds to the present capacity of 93 beds.

Ground will be broken for the new building about July 1. It will probably be ready for occupancy early in 1940.

More than 350 local people took part in a one-week campaign for pledges, which was under the direction of Paul C. Staake, partner in a local advertising and public relations company. Alfred F. Way is superintendent of the hospital. One feature of the publicity committee was a moving picture, entitled "Emergency Case," which was shown to 5000 people.

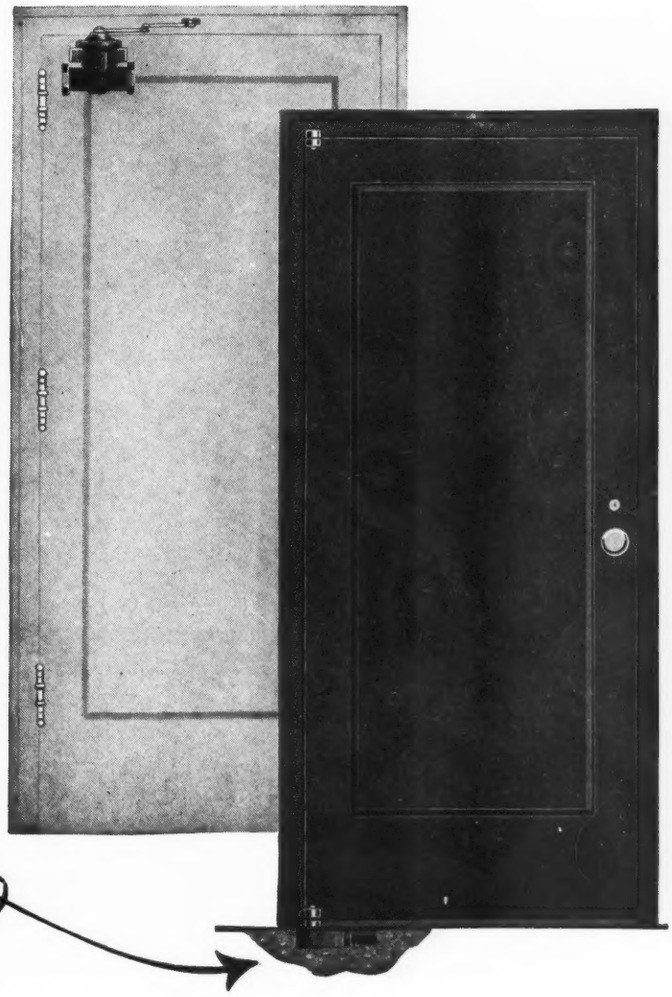
Plan Care for N. Y. Fair Visitors

The Greater New York Hospital Association was requested recently by Dr. S. S. Goldwater, hospital commissioner, to prepare a plan for caring for the visitors to the World's Fair who may become ill during their stay. Doctor Goldwater pointed out that probably from 1000 to 2000 visitors will require hospital service at any one time and that the municipal hospitals are already so full that they can take no more patients. He urged that arrangements be made between the World's Fair Corporation and the voluntary hospitals in place of trying to set up a temporary hospital on the fair grounds.

Pharmacist Seminar Begins

The first of a series of seminars for hospital pharmacists was held by the Association for the Advancement of Professional Pharmacy, New York, on April 18. Subjects discussed at the meeting included the practice of pharmacy in hospitals, preparation and preservation of sterile solutions and teaching hospital pharmacy in the college of pharmacy.

OUT OF SIGHT
but on the job



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Names in the News

Administrators

MRS. GRACE L. MCKELVEY has resigned as superintendent of the Yonkers General Hospital, Yonkers, N. Y., after eleven years of service in that position. HENRY J. KALTENBACH, president of the board, accepted Mrs. McKelvey's resignation with regret and praised her work as head of the hospital.

DR. CHARLES D. PEAVY JR. has resigned as superintendent of the Brackenridge Hospital, Austin, Tex., and as city health officer to go into private practice. The administration of the hospital will be under the supervision of GUITON MORGAN, the city manager. FRANK ALBRECHT will continue as business manager.

DR. MILES G. BROWN has been appointed superintendent of hospitals in Hamilton, Ontario. Doctor Brown joined the staff of the General Hospital in Hamilton in 1919 and two years later was made assistant superintendent.

V. R. BOTTOMLEY, superintendent of the Takoma Hospital and Sanitarium, Greeneville, Tenn., has been elected president of the Tennessee Hospital Association for the coming year. Other officers elected at the one day meeting of the association are: DR. J. E. CARSON, Fort Craig Hospital, Maryville, president-elect; ELIZABETH SLOO, Protestant Hospital, Nashville, vice president, and T. H. HAYNES, Knoxville General Hospital, Knoxville, secretary-treasurer.

DR. FRANK PASCHAL, superintendent of the Robert B. Green Hospital, San Antonio, Tex., has resigned that position to take up the duties of assistant to DR. W. A. KING, city health officer. Graduate nurses of the hospital presented Doctor Paschal with a medical case as a farewell gift.

DR. C. L. RIDLEY, superintendent of the Macon Hospital, Macon, Ga., has been appointed a member of the state board of health. He succeeds DR. A. R. ROZAR, whose six year term expired some months ago.

WALTER H. MENDE, for eight years assistant secretary of the Broad Street Hospital, New York, has been appointed director of the hospital in the first step of reorganization, it has been announced by the board of trustees. Prior to his association with the Broad Street Hospital, Mr. Mende was assistant superintendent of St. Mark's Hospital, New York, which was closed in 1930.

MARY JANE AMES, for the last nineteen years superintendent of the Franklin Hospital, Franklin, Pa., is retiring from hospital work. MRS. MAE MOORE, formerly superintendent of the Miners Hospital, Spangler, Pa., will succeed her.

DR. BURTON A. ADAMS recently assumed the duties of superintendent of the San Diego County Hospital, San Diego, Calif. DR. V. G. CLARK, assistant superintendent, who has been acting head during the illness of DR. E. S. LOIZEAUX, former superintendent, returned to the assistant's position. Doctor Adams had been assistant superintendent of Highland Hospital for ten years prior to his new appointment at San Diego County Hospital.

299 MONTHS

of Knocking on Hospital Doors

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299 months. Not very long, perhaps, as time is measured, but long enough to witness many changes in hospital requirements; to see advancements toward standards unthought of a quarter of a century ago. Long enough to have learned that this business of ours is a mutual enterprise; that only through what we learned from *you* have we been able to provide the kind of merchandise you want, and the type of service your business should have.

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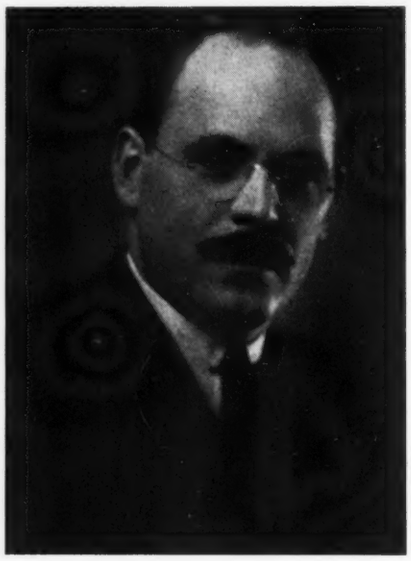
DR. T. J. FATHERREE of the Harris Clinic, Birmingham, Ala., has been appointed superintendent of the newly constructed McKay Memorial Research Hospital for Buerger's Disease at Soap Lake, Wash. Before assuming this position, Doctor Fatherree will spend some time at the National Research Institute of the U. S. Public Health Department in Washington, D. C.

DR. H. C. HAZLEWOOD has been appointed to the post of physician-in-chief at the Muskoka Hospital for Consumptives at Gravenhurst, Ontario. Doctor Hazlewood succeeds DR. W. B. KENDALL, who held the position for thirty-two years until his present retirement.

JAMES T. PATE has assumed his duties as assistant superintendent of the Long Island College Hospital, Brooklyn, N. Y. He served in a similar capacity at the Manhattan Eye, Ear and Throat Hospital, New York City, from 1934 until the present.

MRS. LOLA MAHONEY, formerly tuberculosis nurse of La Salle County, Illinois, has been named superintendent of the De Kalb County Sanatorium, De Kalb, Ill. She succeeds GEORGIA RICE.



ARNOLD F. EMCH, executive director of the Chicago Hospital Council for the last three years, has resigned from that position and will become assistant secretary of the American Hospital Association, succeeding the late LEONARD SHAW. Doctor Emch is a graduate of the University of Illinois and received his Ph.D. at Harvard University.

Trustees

WARREN KEARNY was reelected president of the Eye, Ear, Nose and Throat Hospital, New Orleans, at the annual meeting of the board of trustees. Others reelected include J. FRANK COLEMAN and J. RAOUL VALLON, first and second vice presidents; MARCUS WALKER, treasurer, and L. ANDRE WOGAN, secretary.

FRANK C. SPINNEY was reelected president of the board of directors of the Lynn Hospital, Lynn, Mass. ALFRED E. CHASE was chosen treasurer.

A. ROBERT MUNRO was elected president of the Knickerbocker Hospital, New York City, at the meeting of the board of directors. Mr. Munro succeeds E. MOORE ROBINSON.

Deaths

DR. RICHARD C. CABOT, noted physician and professor of medicine at Harvard University, died on May 8 after a long illness. Doctor Cabot was the founder of modern medical social service. In 1931 he served as president of the National Conference of Social

Faultless Full-Grip Expansion Socket in metal tubing, supporting direct pull of 1322 lbs. without sign of slippage.

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Work and was awarded the gold medal by the National Institute of Social Science in the same year. He was widely known for his writings in the field of social welfare. He was a member of the Committee of Physicians that favored a liberal attitude on the part of doctors toward social medicine.

SISTER ROSE ALICE CONWAY, superintendent of St. Joseph's Hospital, Elmira, N. Y., died at the age of 63 after a long illness. In 1907 she was chosen with five other nuns to assist in organizing the hospital sponsored by the order of St. Joseph and has been the superintendent since its opening in 1908.

SIMON BERGMAN, president of Sydenham Hospital, New York, died on May 11 at the age of 69 years. Mr. Bergman had served as president of the hospital for seven years. During that time he was responsible for the introduction at Sydenham Hospital of a plan for hospitalization and medical care insurance for patients of moderate means.

DR. G. WALTER ZULAUF, administrator of the Allegheny General Hospital, Pittsburgh, died on May 9.

CHARLES H. YOUNG, former superintendent of the old Deaconess Hospital, Indianapolis, died recently.

Palestine Medical Center Opens

The completion and opening of the first medical center in Palestine was celebrated with a dedication dinner held on May 9 by the Women's Zionist Organization. The new center, which is situated atop Mount Scopus in Jerusalem, has been named the Rothschild-Hadassah-University Hospital and Medical School and will become the headquarters for all the public health projects of the Hadassah medical organization in Palestine.

Dental and Surgical Imports Drop

Dental and surgical goods imported into the United States for consumption during 1938 totaled $663,512, a 20 per cent decrease from the 1937 figure of $830,242. Dental goods accounted for 34 per cent of the 1938 imports; surgical goods, 57 per cent, and hypodermic syringes and medical and scientific thermometers, the remaining 9 per cent. Germany was the principal source of imports in 1938.

Quiz, Skits, Fair Interest New York Hospital Association

(*Continued from page* 116)

Dr. Frederick MacCurdy, superintendent, Vanderbilt Clinic; William B. Seltzer, superintendent, Bronx Hospital, and Jerome F. Peck, superintendent, Binghamton City Hospital.

Officers elected for the coming year are: president, Jerome F. Peck, superintendent, Binghamton City Hospital; first vice president, Dr. Frederick MacCurdy, superintendent, Vanderbilt Clinic; second vice president, Basil C. MacLean, director, Strong Memorial Hospital, Rochester, and treasurer, A. J. Shoneke, superintendent, New Rochelle Hospital.

John H. Olsen, director, Richmond Memorial Hospital, Staten Island, was elected to the board, completing the term of Doctor MacLean, and Joseph J. Weber, superintendent, Vassar Brothers Hospital, Poughkeepsie, and Jessie P. Allan, superintendent, Kingston Hospital, Kingston, were elected as trustees succeeding Mabel Davies, superintendent, Beekman Street Hospital, and Thomas T. Murray, superintendent, Memorial Hospital, Albany.

Administrative office and private room
—Santa Fe Hospital, Los Angeles, Calif.*

● ***Sanvale Fabrics*** **are sun-fast, tub-fast, hard to soil and easy to launder...dust and dirt shedding because they're woven with Mohair... wrinkle-resistant. For home-like private and semi-private rooms, wards and administrative offices large and small American hospitals are using *Sanvale Fabrics*.**

* *Office: Sanvale drapes. Room: Sanvale drapes and upholstery*

SANVALE FABRICS . . . BY GOODALL
Woven in Sanford, Maine
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L. C. CHASE AND CO.
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Please send samples with full information. Interested in:

☐ Draperies ☐ Upholstery
☐ Casement Cloth ☐ Bedspreads
☐ Shower Curtains

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BOOKS ON REVIEW

THE HISTORY OF NURSING IN NORTH CAROLINA. *By Mary Lewis Wyche. Edited by Edna L. Heinzerling. Chapel Hill: University of North Carolina Press,* 1938. *Pp.* 151. $2.

Except for the heroic efforts of untrained volunteers to cope with the desperate situation in military hospitals during war periods, there is little to record about nursing in North Carolina until the time of Florence Nightingale, Pasteur, Koch and Lister.

In 1894 Mary Lewis Wyche returned from the Philadelphia General Hospital to found North Carolina's first school of nursing at the new Rex Hospital in Raleigh. Miss Wyche and other pioneers, true to the Nightingale traditions, left an indelible impression upon the nursing profession in the state.

Miss Wyche recognized the fact that the future of nursing in North Carolina depended upon an intelligent appreciation of its history. She accumulated the manuscript and the book was published by the state nurses' association after her death. No school of nursing in North Carolina can well afford to be without this book in its library as an inspiration to its students.—Graham L. Davis.

AT THE BAR OF PUBLIC OPINION. *By John Price Jones and David McLaren Church. New York: Inter-River Press,* 1939. *Pp.* 181. $2.

This is an excellent statement of the modern concept of public relations although too brief to be more than a cursory introduction. Yet even an introduction written from the right point of view is better than most of the quite unsatisfactory materials now available.

Most of the illustrations in the book are drawn from the history of business rather than from social institutions. The intelligent hospital administrator and trustee, however, will have no difficulty in making application to their own field. The book's important message is that public relations is not something appended to a structure but a basic element running throughout an entire organization.—Alden B. Mills.

RECIPES AND MENUS FOR ALLERGICS. *By Myra May Haas, in collaboration with Nathan Schaffer, M.D. Menus by Cay Hillegas. Illustrations by O. Soglow. New York: Dodd, Mead & Co.,* 1939. *Pp.* 250. $2.50.

The recipes in this book are an outgrowth of Mrs. Haas' experiments with foods to meet her own needs as an allergic patient. Included are menus and recipes for egg free, milk free and wheat free diets, as well as for combinations of the three. There are, also, a few suggestions for miscellaneous allergies.

Doctor Schaffer contributes a brief discussion of allergies, their diagnosis and treatment, addressed to the physician. He lists several commercially prepared food products and their ingredients to serve as a guide in prescribing, *e.g.* plain and mixed spices and condiments, sauces and dressings, beverages and cereals.

The recipes cover a wide selection of bakery products, such as hot breads, cakes and pies. For those familiar with allergies and with dietetics this book will help in planning a variety of dishes. Without this foundation some difficulty may be encountered in applying it.—Lulu G. Graves.

Investigate

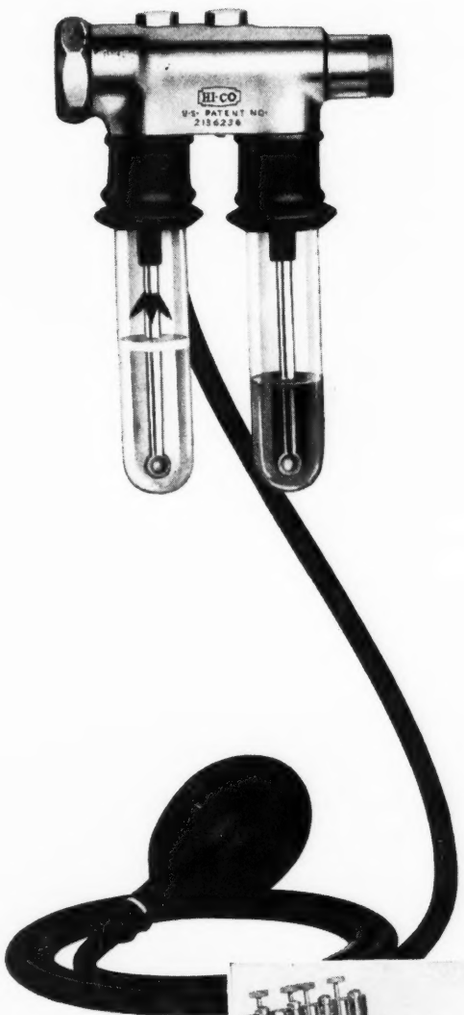
THIS GREAT NEW ADVANCEMENT

in

MODERN ANESTHESIA

THE HI·CO

CO_2 DETECTOR

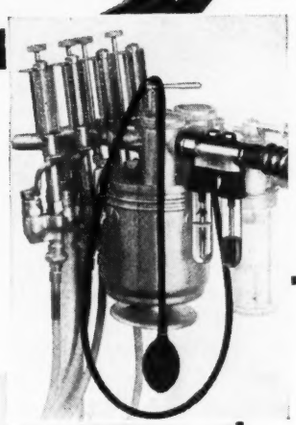


- **ELIMINATES THE DANGER** of patient breathing unusual quantities of Carbon Dioxid.
- **INDICATES CLEARLY** and *positively* whether or not soda lime is functioning properly.
- **WARNS ANESTHETIST** when soda lime should be changed.

● **FITS *YOUR* GAS MACHINE** ● **CONTINUALLY ECONOMICAL**
● **OPERATES WITH EXTREME EASE** ● **LOW IN COST**

A NEW AND IMPORTANT SAFEGUARD

in the administration of anesthetics that gives the anesthetist a feeling of ease and certainty never before experienced.



THE OHIO CHEMICAL & MFG. CO.

PIONEERS AND SPECIALISTS IN ANESTHETICS
1177 MARQUETTE ST. CLEVELAND, OHIO
Branches in All Principal Cities

MAIL THE COUPON *TODAY!*

THE OHIO CHEMICAL & MFG. CO., CLEVELAND, OHIO
Tell us how the New Hi-Co CO2 Detector will make anesthesia safer for us and our patients.
Our gas machine is_____ (MAKE) _____ (MODEL)
No obligation, of course.
NAME_____
ADDRESS_____
CITY_____ STATE_____

RELAXATIVES

FLORENCE NIGHTINGALE CLUB

FAITH HOPE CHARITY

• *This chain was started in the hope of bringing adequate nursing care to all hospitals. Unlike most chains, this one does not cost you any money. Send a copy of this letter to five hospital administrators, then bundle up one of your nurses and send her to the person who heads the list. When your name works up to the top of the list, you will receive 15,175 nurses!*

High Pressure Selling

Howar Lake Minn.
July 26th 1938

• Miller Hosp.
Supt.

My Dear Sir:

I was in your Hospital to see you yesterday and you was very busy so I thought that I would write and explain this Flower to you. We have gather over one Thousand Holy land Flowers from the Holy land. This flower is call the Ressurection Plant known as the Rose of Jercho and Rose of Sharon mention in the Bible and the Dictio naries. This plant will never die. Only grows in the house in the water will open out and start to grow in twenty minutes after place in the water will grow to twenty nine inches over thebowl and will give a ordor as Roses over the Room after the same has completly open up. This is a wonderful plant for the Lobby office Sick Room are home. It will not grow out side it only grows in the water in the house you can change the water only when you thing it has became rancid these plants need no care and never die. I sold the same to all other places when I left your place you cannot get these plants only from us as we brought them from the Holy land and only a few around this is something new and you will like like the same. We will send you the same for $1.50 each reminber these plants never die as I tell you. No matter how long they have grow in the water you can take the same out of the water and they will dry up and go to sleep the leaves will fall off. after you please them in the water they will open up and start to grow again. They will be here for many gernerations in your family. Send for a few and see for yourself. Yours Truly Virgil Leartes Meyhatma. General Delivery

Grand Forks North Dakota.

"CUTTING" PRICES

• *A printer got slightly peeved at a letter from a doctor who wanted bids on several thousand letterheads of different sizes, different grades and different colors and wanted the printing form held standing. The printer wrote this in reply:*

"I am in the market for bids on one operation for appendicitis—one, two and five inch incision, with or without ether; also with or without nurse. If appendix is found to be sound, I want quotation to include putting back same and cancelling order. If the appendix is removed, the successful bidder is expected to hold incision open for about sixty days, as I expect to be in the market for an operation for gallstones at that time and I want to save the cost of a second cut."

NO. 935 DAVOL *SAFETY* CRUTCH TIP. SIZE, 7/8" IN DIAM.; RED.

Vacuum Grip

CRUTCH TIP

Built for hard wear; rugged throughout. The base area is more than three times that of usual crutch tip; the ferrule hole is more than twice as deep. Concave base creates an automatic vacuum-suction, holding crutch firmly to the ground at any angle. Wear-resistant plug in center. Packed one pair in box. Made in one size only.

DAVOL

DAVOL RUBBER COMPANY, PROVIDENCE, RHODE ISLAND

IT'S SAID THAT—

A complete electrical cafeteria contained in one body on four wheels has been manufactured by the SWARTZBAUGH MANUFACTURING COMPANY, Toledo, Ohio; in use it is preheated for approximately forty-five minutes after which the food is placed in the conveyor utensils and the conveyor is taken to the serving station in the dining room. . . . Greater comfort and relaxation in sleep are the features of the "perfect posture" mattress, invented by Dr. Norman Mattison, now being manufactured by the OWEN SILENT SPRING COMPANY, Bridgeport, Conn. . . . The problem of feeding cleanser to dishwashing solutions has been solved by the development of a rugged, clogproof feeder for fused alkali briquets, recently announced by the MATHIESON ALKALI WORKS, 60 East Forty-Second Street, New York.

The WIESNER-RAPP CO., INC., Buffalo, N. Y., has announced the invention of a new "aluminum lung," which weighs only 460 pounds and which takes up less space than an ordinary hospital bed. The unit is equipped with an emergency crank for hand operation when electricity is not available. . . . A standard five or ten day menu sheet is offered to dietitians by the KELLOGG COMPANY, Battle Creek, Mich., as a means of checking menus for variety and recording the data in a concise and permanent form. . . . The new Zarmite foot power press, recently introduced by the AMERICAN LAUNDRY MACHINERY COMPANY, Cincinnati, features low price and high pressure. A convenient adjustment makes it possible to maintain maximum pressure regardless of condition of padding or thickness of the work being pressed. The machine is available in six models.

A quiet, whirlpool action, siphon jet water closet with elongated rim is being marketed by CRANE COMPANY, 836 South Michigan, Chicago. The new unit is called "Whirlton." . . . A new time and temperature sterilizer control, called "Tempotherm," has been developed by the WILMOT CASTLE COMPANY, Rochester, N. Y. The unit requires no setting and does not begin to operate until a temperature of 250°F. has been reached in the coldest part of the sterilizer.

The SHERWIN-WILLIAMS COMPANY of Cleveland has recently released a 24 page report in color describing Kem Lustral Enamel, a finish that can be brushed, sprayed, air-dried or baked and applied to wood or metal surfaces. . . . A handsome full leather portfolio for keeping on file complete information regarding its line of showers and fixtures is being distributed by the SPEAKMAN COMPANY, Wilmington, Del. Each classification is clearly indicated, making it possible to turn at once to the section on hospital fixtures, as well as to other items, such as flush valves, lavatory fixtures and showers.

At the annual directors' meeting of the J. B. FORD SALES COMPANY, Wyandotte, Mich., C. B. Robinson was elected president and W. F. Torrey, secretary-treasurer. Both will serve on the board of directors.

W. J. Hill, for the last twenty years sales manager of the DETROIT-MICHIGAN STOVE COMPANY, Detroit, died April 20 after an illness of several weeks. Mr. Hill had been associated with the organization for forty-two years.

WITH WYANDOTTE DETERGENT YOU GET SAFETY

Here are some of Wyandotte Detergent's advantages:

1. Even the most careless worker will find it almost impossible to harm surfaces being cleaned.

2. Soiled painted surfaces can be washed many times without scratching or dulling the paint film.

3. Cleans so thoroughly and rinses so completely that it leaves no deposit or slippery film on washed surfaces to attract or hold soil, or to cause accidents.

4. Tests show that it is almost impossible in ordinary cleaning procedure to scratch, scar or dull painted, enameled or marble surfaces or plumbing fixtures of any kind.

5. Wyandotte Detergent can be used safely for all maintenance cleaning and also for (1) washing soiled painted surfaces, (2) cleaning tiled and enameled surfaces, (3) mopping floors of all kinds, and (4) washing or poulticing soiled marble.

To all these advantages add the fact that users of Wyandotte almost invariably report that, per unit of satisfactory cleaning, Wyandotte Detergent gives them the *lowest cost ever shown by their auditors.*

Order Wyandotte Detergent from your jobber. Prove its safety and economy on your own jobs for a week or a month. If you are not entirely satisfied with the results, your money will be returned.

THE J·B·FORD COMPANY

WYANDOTTE MICHIGAN

DISTRICT OFFICES IN 26 CITIES

READER OPINION

Sirs:

In The Modern Hospital for October 1938, you make the statement that the Hôtel-Dieu in Quebec is the oldest hospital on the North American continent. I think Mexico City's Hospital de Jesus founded in 1524 by Cortez would question this statement.

Graham L. Davis.

The Duke Endowment,
Charlotte, N. C.

Warning to Hospitals

Sirs:

We had the following fraud case which I thought might be interesting for you to publish as a warning to other hospitals.

A man called one of our well-known doctors and asked him to reserve a private room for his son who had been injured in a neighboring town and was then on his way to the hospital. The doctor made the reservation and a little later the man came in and asked to see the room. He also inquired about the price of meals and of a cot in the room for his wife and asked if he might bring a radio. He then asked to pay a week in advance on the room as he was going out of town. Because the doctor had called us, we took his check and gave him $20 difference in cash. He went to another hospital and did the same thing. To date, neither hospital has seen or heard anything further from this patient.

The man gave his name as C. F. Williams.

Byrd B. Holmes,
Superintendent.

Greenville General Hospital,
Greenville, S. C.

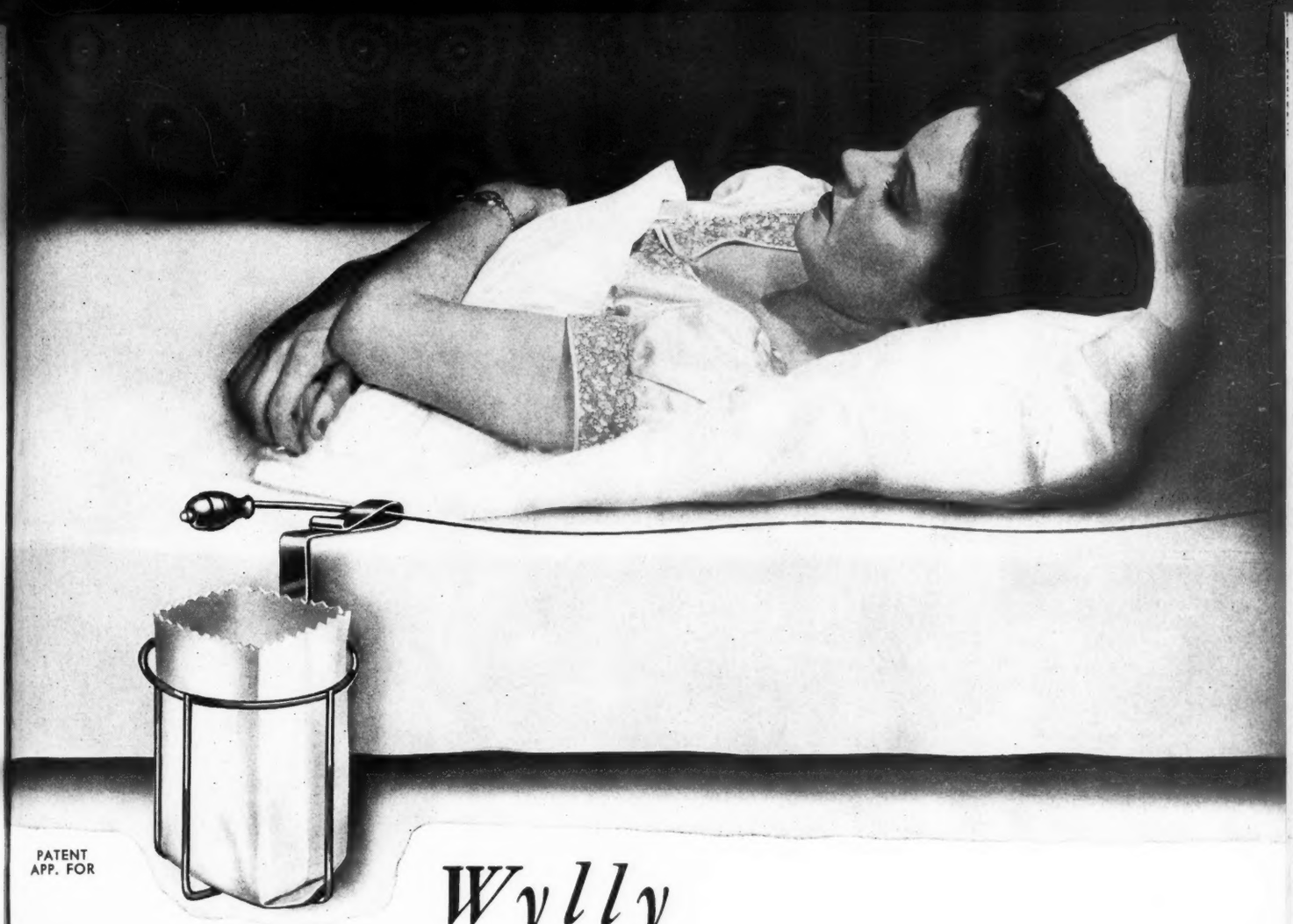
Who Is to Blame?

Sirs: If a hospital administrator can face his community and say, "We are proud of our dietary department and its head," he is to be commended. Nine out of ten hospital administrators are comparable to husbands who dole out sufficient money to their wives to purchase a season's outfit at the cheapest shop but who are annoyed if she does not have that French, or in recent days, that New York and Chicago "smartness." Either the credit of the organization is poor and the dietitian is forced to buy where she can, or the budget is most insufficient, or the administrator encourages her to employ persons lacking in experience. I have seen scrub women remodeled by dietitians into cooks when the time thus engaged should have been devoted to food consultation with the patients.

Again, there is the administrator who enjoys good food but who complains when there is an increase in dietary expenditures. He does not realize that the dietary department cannot be a money making department. I am not upholding waste, but a hospital is known for the type of food served within its doors. The reasons for food complaints should be studied. Staff members should carry their complaints to the person responsible for the food errors instead of discussing them at stag parties. Food complaints that cannot be corrected by the department head should be carried to the power behind the "dietetic throne." Dietitians will then feel that the daily routine is not just a part of their jobs.

Mary Edna Golder,
Dietitian.

St. Anne's Hospital,
Chicago.



PATENT APP. FOR

Wylly

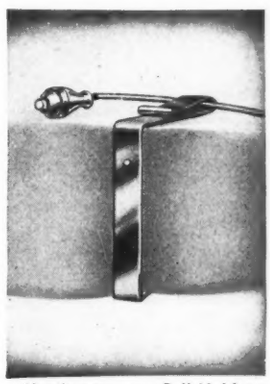
BELL AND WASTE RECEPTACLE HOLDER

With the Wylly Bell and Waste Receptacle Holder, you can say goodbye to the nuisance of tying the call button to the bed post or pinning it to the sheet. Gone are the broken call buttons, the torn sheets and the fussing when it is time to make the bed. The Wylly Holder is quickly and easily snapped into position and it leaves the call button and waste bag always within easy reach of the patient. When making the bed, it can be detached in an instant.

The spring-clamp holds the unit firmly in place. The bag holder can be quickly attached or detached from the clamp without pins or other attachments. The bag may be used for disposal of mouth wipes, fruit peels, waste dressings and other waste materials. A few seconds—and a fresh bag is in place while the old one is off to the incinerator.

The bag holder can be supplied in two sizes: 5 in. diameter and 8½ in. deep or 7¼ in. diameter and 14 in. deep. It will also hold a basin, which can be used for minor dressings and for other purposes. Both the bell holder and the bag holder have a lustrous cadmium plated finish which will protect them indefinitely.

This appliance is manufactured by the HOSPITAL SUPPLY COMPANY, pioneer manufacturers of Sterilizers and Hospital Equipment established in 1898.



Showing use as a Bell Holder

MAIL COUPON

The Hospital Supply Co.
155 E. 23rd St., New York, N. Y.

Please send literature and prices on the Wylly Bell and Waste Receptacle Holder.

Name .....

Attention of .....

Address .....

.....

THE HOSPITAL SUPPLY CO.

155 EAST 23rd STREET, NEW YORK

THE extreme care used in the production of Squibb Cyclopropane results in a gas of exceptional purity. Exacting control begins with the selection and testing of the raw materials. Elaborate purification methods are employed and careful chemical analyses are made before the gas is released for use.

The high quality of Squibb Cyclopropane has been amply demonstrated by clinical experience and the Squibb product has been generally accepted by anesthetists throughout the country as a dependable anesthetic agent.

Cyclopropane Squibb is supplied in 30 (AA)-, 75 (B)-, and 200 (D)-gallon cylinders and in 2-, 6-, and 25-gallon Amplons.* The AA, B, and D Squibb cylinders are made of special thin steel. They are light in weight (the D cylinder weighs only 7½ pounds), yet comparable in strength to the old standard cylinders.

Note: Cyclopropane is a highly potent gas and should be used only by anesthetists familiar with the technique of its administration.

*Amplon is a trade-mark of E. R. Squibb & Sons.

For information and booklet on Cyclopropane address the Anesthetic Division, 745 Fifth Avenue, New York.

E·R·SQUIBB & SONS, NEW YORK
MANUFACTURING CHEMISTS TO THE MEDICAL PROFESSION SINCE 1858

The Modern Hospital

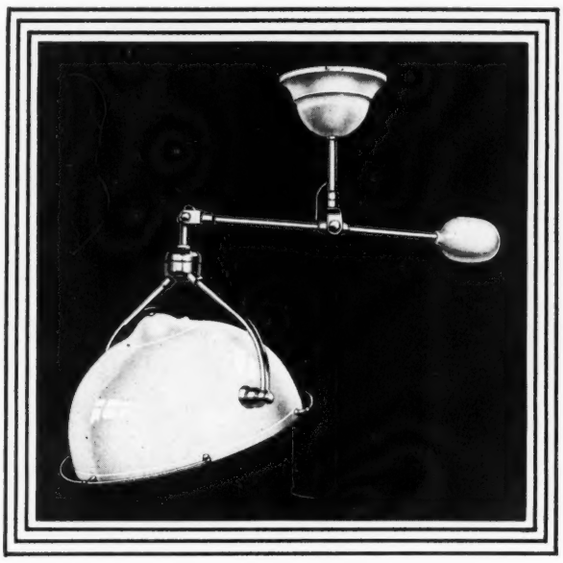
the MODERN HOSPITAL

☆

Published monthly and copyrighted, 1939, by The Modern Hospital Publishing Company, Inc., 919 N. Michigan, Chicago, and 101 Park Avenue, New York City. Otho F. Ball, president; Raymond P. Sloan, vice president; Stanley R. Clague, secretary; J. G. Jarrett, treasurer. Yearly subscription, U. S. A. and Canada, $3; foreign, $4. Single copies: current, 35c; back, 50c to $1. Entered as second-class matter, Oct. 1, 1918, at the post office at Chicago, Ill., under the act of March 3, 1879. Printed in U. S. A.

The American Luminaire

Gives MORE LIGHT—BETTER LIGHT with LESS HEAT and SHADOWS



A scientifically correct statement that will bear critical analysis, but let's see what these relative terms boil down to:

More Light

Graduated quantity of light at the illuminated area on the operating table—3000, 1500 or 1000 foot candles at your command. Check with your light meter, see if you can get an equivalent amount of illumination with any other surgical light.

Better Light

The degree of approach to the quality of daylight is measured in terms of degrees Kelvin. This light, as reported by General Electric (Nela Park) Laboratories, shows 4000° Kelvin, the equivalent of average daylight one and one half hours after sunrise.

Less Heat

Infra red and yellow rays are triple filtered. The maximum heat rise in the significant area occupied by the surgeon's head is only one and one-half degrees Fahrenheit.

Less Shadows

An elliptical reflector is used, 36″ diameter, 16″ deep. It provides a continuous source of *unsegmented* rays, an infinite number of projected rays properly focused for shadow reduction and depth of penetration, the maximum possible to produce with any surgical light with any single or mutiple source of light.

DEMONSTRATION will emphasize these facts. Write for a copy of the new Luminaire Catalog—and be sure to see our exhibit of lights, operating tables and sterilizers at the Toronto Meeting of the A. H. A.

AMERICAN STERILIZER COMPANY

ERIE, PENNSYLVANIA

Sales Offices in New York, Chicago, Boston, St. Louis, Los Angeles • Agencies in Principal Cities in the United States • Represented in Canada by Messrs. Ingram & Bell, Ltd., Toronto, Montreal, Winnipeg, Calgary

INDEX OF ADVERTISERS

This ★ symbol preceding firm name signifies that a Catalog or other Advertisement will be found in The HOSPITAL YEARBOOK, 17th Edition

Continued on page 12

CONGRATULATIONS TO THE WINNERS IN CANNON'S EXECUTIVE HOUSEKEEPERS' CONTEST!

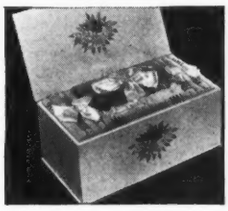
★ FIRST PRIZE WINNER

SISTER M. DOMINIC, R. S. M.
St. John's Hospital . . . . . St. Louis, Missouri

To Sister Dominic goes a handsome cedar chest packed with 74 pieces of Cannon's finest merchandise: Fine Virgin Wool Highland Blankets, Finest Percale Sheets and Pillow Slips, and Cannon's Sovereign Bath Ensemble.

★ SECOND PRIZE WINNER

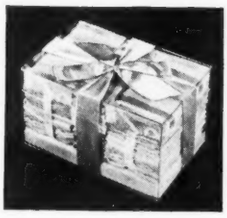
MISS MAE E. SCHARLIN
Lycoming Hotel . . . . . Williamsport, Pennsylvania



To Miss Scharlin goes a colorful Dutch Painted Linen Chest bulging with 54 pieces of Cannon's finest merchandise: Fine Virgin Wool Highland Blankets, Finest Percale Sheets and Pillow Slips, and Cannon's Royal Towel Ensemble.

★ THIRD PRIZE WINNER

MISS ADA M. OLSEN
Santa Barbara Cottage Hospital . Santa Barbara, California



To Miss Olsen goes a unique Transparent Box proudly displaying 51 pieces of Cannon's merchandise: A Fine Virgin Wool Highland Blanket, Utility Percale Sheets and Pillow Slips, and Cannon's Ribbon Bow Towel Ensemble.

★ FOURTH PRIZE WINNER

MISS ADELE B. FREY
Hotel Hollenden . . . . . Cleveland, Ohio

To Miss Frey goes a beautiful Cannon Dowry Chest filled with Cannon Sheets, Cannon Pillow Slips, Cannon Towels and Wash Cloths.

OTHER PRIZE WINNERS

Miss Jeanne Greenwald	*Hotel Ambassador*, N. Y. C.
Mrs. M. Marcella	*The Langham Hotel*, Los Angeles, Calif.
Miss Mary Donahoe Smrcina	*McCurdy Hotel*, Evansville, Ind.
Mrs. Kermit Harrell	*Sullivan Hotel*, West Baden Springs, Ind.
Miss Mildred Foote	*Washington Youree*, Shreveport, La.
Mrs. F. P. Tilton	*Kentuckian Hotel*, Lexington, Ky.

To these winners go handsome 18-piece Cannon Towel Sets

• • •

THANKS TO ALL ENTRANTS:

Entries were far above our expectations—all excellent in their approach to the questions. The selection of prize winners was a difficult task for the judges, but all choices were finally unanimous.

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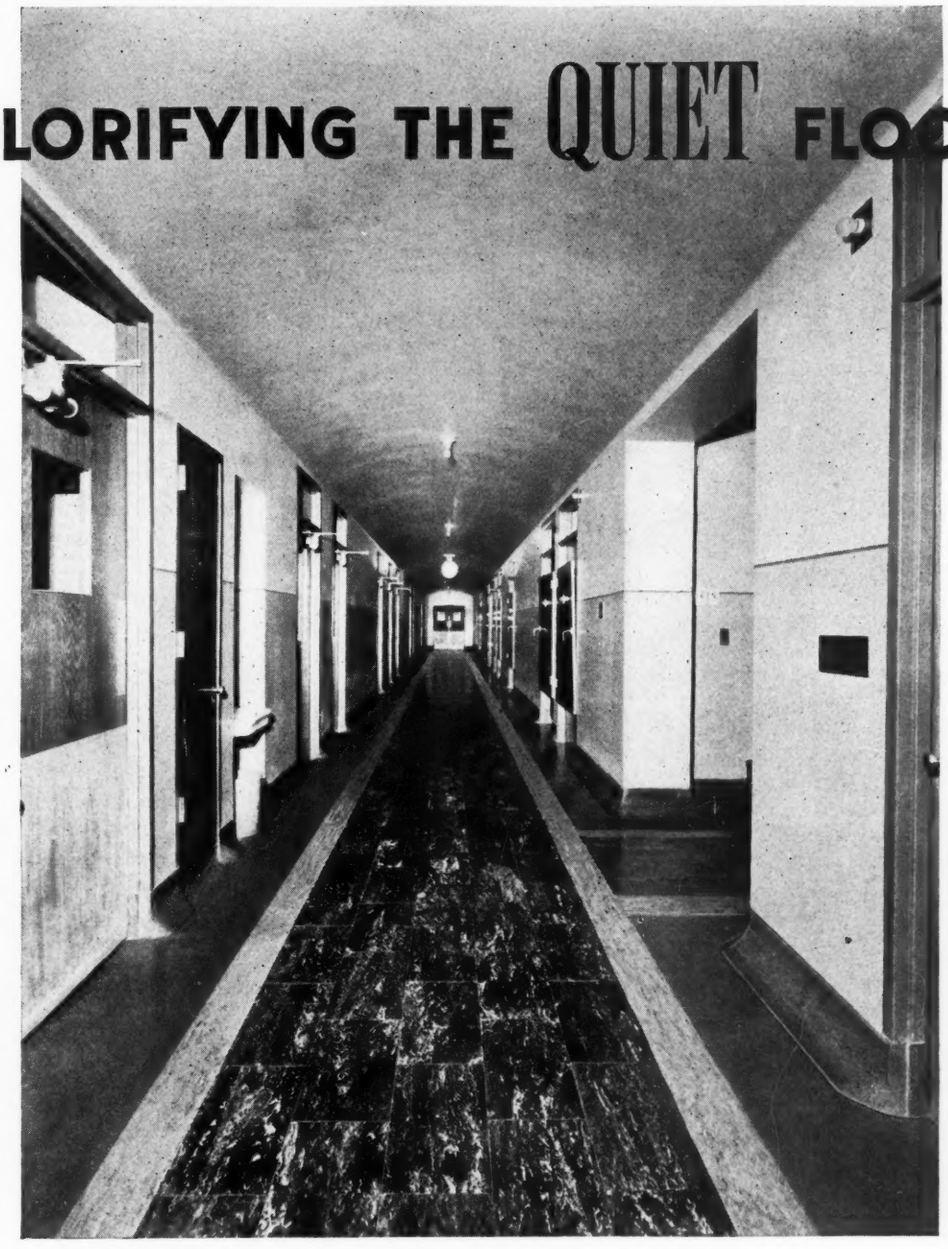
GLORIFYING THE QUIET FLOOR



In the hallway of the Albert Billing's Hospital, Chicago, this Armstrong-Stedman Rubber Tile Floor offers a combination of comfort, color, quiet, and long wear.

To muffle footsteps, please the eye, and ease the feet, hospitals use Armstrong-Stedman Reinforced Rubber Tile

HOSPITALS and noisy floors don't belong together. That's why you find so many hospital floors made of quiet, resilient Armstrong-Stedman Reinforced Rubber Tile.

This floor cushions footsteps and provides a maximum of wear. Through it run invisible reinforcing fibres that prevent denting, buckling, and crazing. The colors extend through the full thickness of the material. Scuffing feet and scraping furniture can't wear them off. No expensive refinishing is required.

Armstrong-Stedman Rubber Tile is as beautiful as it is practical. There are fifty-six plain, marble, paisley, and two-tone colors from which to choose. With this wide range, it is easy to achieve the most modern effects. Installation is easily made right over old floors; and your cleaning problem may be simplified by the use of a rubber cove-base that can be supplied in matching colors.

Write now for all the details. Armstrong Cork Company, Building Materials Division, 1210 State Street, Lancaster, Pennsylvania.

For hospitals, Armstrong manufactures the only complete line of resilient floorings: Linotile (Oil-Bonded), Linoleum, Asphalt Tile, Cork Tile, and Armstrong-Stedman Reinforced Rubber Tile.

RUBBER TILE • LINOTILE (OIL-BONDED) • ASPHALT TILE

Armstrong's LINOLEUM *and* RESILIENT, NON-CERAMIC TILES

CORK TILE • LINOWALL • ACOUSTICAL CEILINGS

The vital rôle of the antiseptic...

The sequelae of postoperative infection can mar the accomplishments of even the most brilliant techniques. Surgery, however skillful, must be supported by efficient disinfection.

For this exacting purpose, Tincture Metaphen, an alcohol-acetone-aqueous solution of Metaphen 1:200, is recommended. Its usefulness rests largely on two important properties: it is nontoxic and relatively non-irritating to the unbroken skin, and it is an effective disinfecting agent.

The superiority of Tincture Metaphen in these two respects and in length of action is emphasized by a recent report.* On the oral mucosa, Tincture Metaphen was found to reduce bacterial count 95 to 100% within five minutes; to cause only a slight irritation in some cases, no irritation in the others; and to have, in substantial excess of any other antiseptic tested, a duration of action of two hours.

Tincture Metaphen does not affect surgical instruments or rubber goods. It is quite stable when exposed to air. The distinctive orange stain which it produces clearly delineates the field of application, yet may be easily and quickly removed from skin or from linens by washing with soap and water.

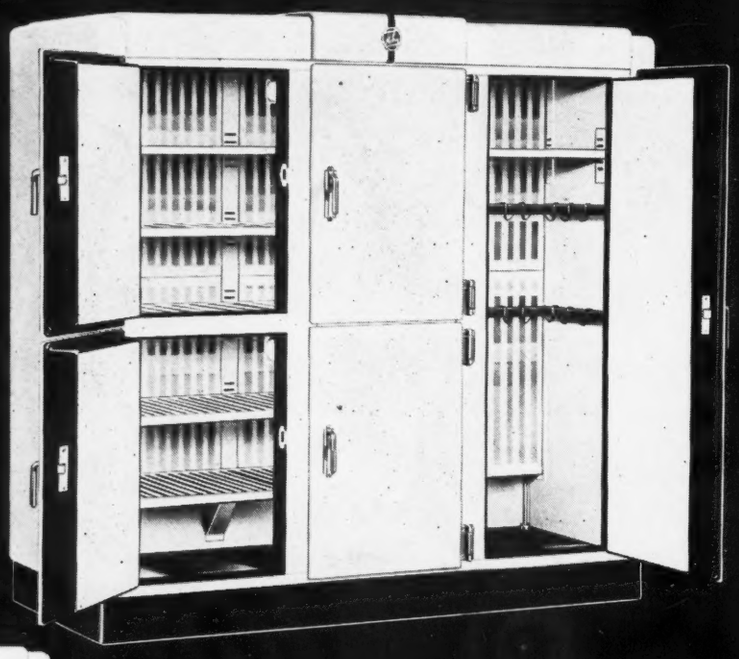
Tincture Metaphen is supplied in 1-ounce, 4-ounce, 16-ounce and 1-gallon bottles. Tincture Metaphen, *Untinted*, is also available for use where a safe and efficient antiseptic is indicated, but where staining is undesirable. It is available at all pharmacies in the same package sizes as the tinted Tincture Metaphen. Abbott Laboratories, North Chicago, Illinois.

*Meyer, E., and Arnold, L.: Amer. Jour. Digest. Dis.; vol. 5, page 418, September, 1938

TINCTURE METAPHEN

(4-nitro-anhydro-hydroxy-mercuri-orthocresol, Abbott)

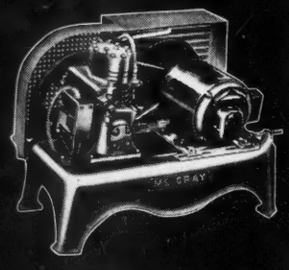
McCray



McCray Money Maker Master Model RJ440-S. Convenient four-door model, gleaming white porcelain exterior and interior with black porcelain base and floor. Ten white porcelain shelves. Modern hardware of bronze, chromium plated polished.

McCray Money Maker Master Model RJ660-S. This very popular type refrigerator embodies generous storage space, with special compartment for meat at the right. Porcelain interior and exterior. Modernistic bronze hardware, chromium plated. Equipped with McCray coils.

McCray compressors are available in complete range of sizes from ¼ h. p. to 15 h. p. McCray factory engineers specify the exact capacity required to cool each McCray refrigerator efficiently and economically.



McCRAYS ARE MONEY SAVERS

• • • *and Here's Why*

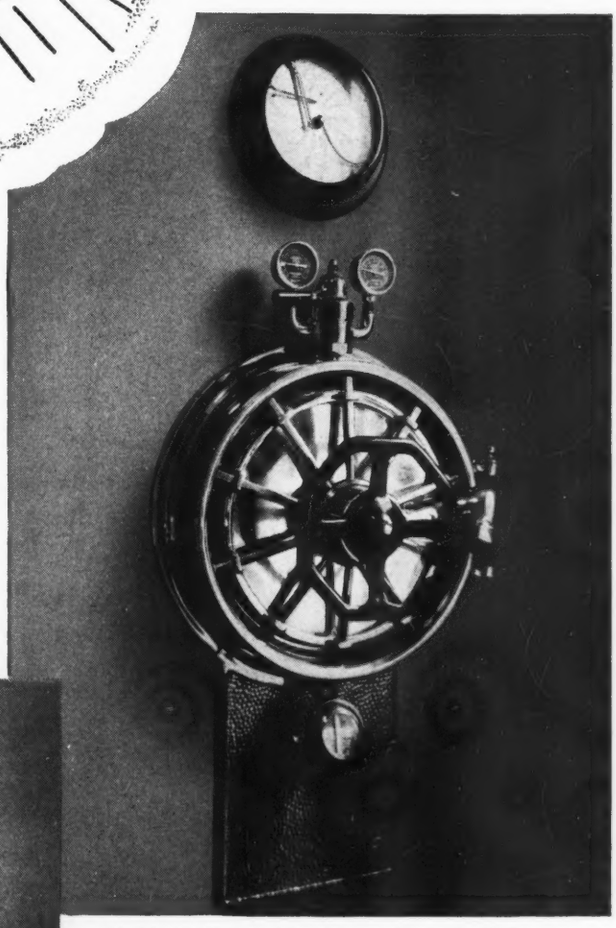
Uniform temperatures, positive yet gentle circulation, proper humidity... all these essentials of efficient refrigeration are achieved with a minimum cost of operation in the perfectly balanced McCray system, with cabinet, coils and compressor designed and engineered for use together.

In the sound engineering of these new McCray models—engineering based on nearly a half century of experience in commercial refrigeration—lies the important secret of their money making qualities. In your kitchen McCray equipment means lower operating costs and an end to spoilage. There are models to meet your needs. Write for details.

McCRAY REFRIGERATOR COMPANY, 966 McCray Court, Kendallville, Ind. Salesrooms in All Principal Cities. (See telephone directory.)

AGAIN THE STANDOUT VALUE IN COMMERCIAL REFRIGERATION

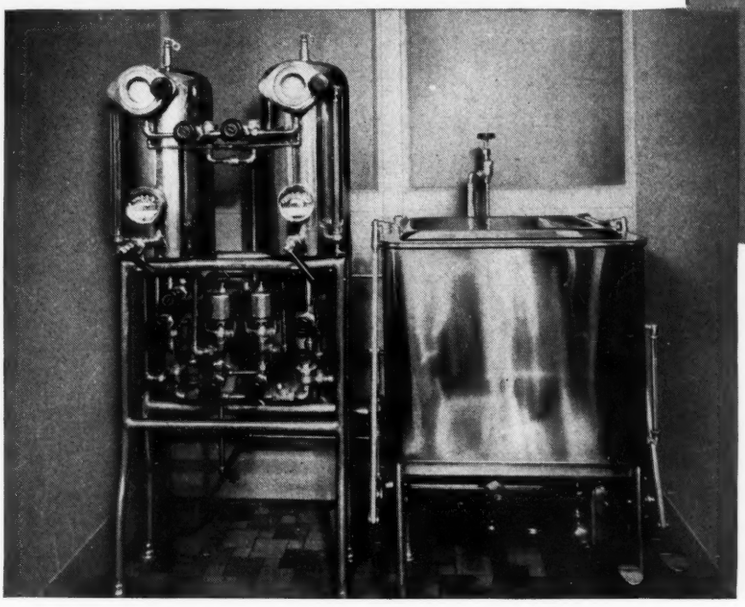
DEATH for Germs... LIFE for Equipment



You assure <u>both</u> when you specify Monel for sterilizers

WHICH is more important in sterilizers: Absolute sterility... or economical long life? Obviously, you want both. And when you specify Monel you *get* both. Here's why:

Monel sterilizers *cannot* rust. Neither are they corroded by saline solutions. Monel is also impervious to the action of steam... and has no coating to chip or peel and has plenty of strength to stand hard usage.



Monel sterilizers installed by the American Sterilizer Co. of Erie, Pa. in the Out Patient and Laboratory Building, Medical College of Virginia, Richmond, Va.

So one thing you are sure of in a Monel sterilizer is a clean, sanitary interior.

Equally certain is the fact that a Monel sterilizer is good for years of economical service. For Monel is strong and tough... at welds, as well as in the parent metal. Furthermore, it is nearly *twice as stiff* as brass or copper, and so withstands abuse.

The superiority of Monel sterilizers is widely recognized in hospitals, and also in government institutions. That is why you find them in hundreds of hospitals both here and abroad. Also in many Government Hospitals.

The properties that make Monel an excellent metal for sterilizers, have also led to its widespread use for other hospital equipment. So in ordering stainless equipment for wards, clinics, operating rooms, kitchens, etc., specify Monel. Write for further information on this rust proof, long-lived metal. Address:

THE INTERNATIONAL NICKEL COMPANY, INC.
67 Wall Street **New York, N. Y.**

MONEL "Monel" is a registered trade-mark of The International Nickel Company, Inc., which is applied to a nickel alloy containing approximately two-thirds nickel and one-third copper.

Exide System supplies light for several operations when storm breaks power line . . .

"THE first lightning storm of the season found this hospital well prepared. Although several operations were in progress when a tree broke the power line, not a single operating room suffered from lack of light. The Exide Emergency Lighting System operated *instantaneously* and *automatically* when the normal electric supply failed."

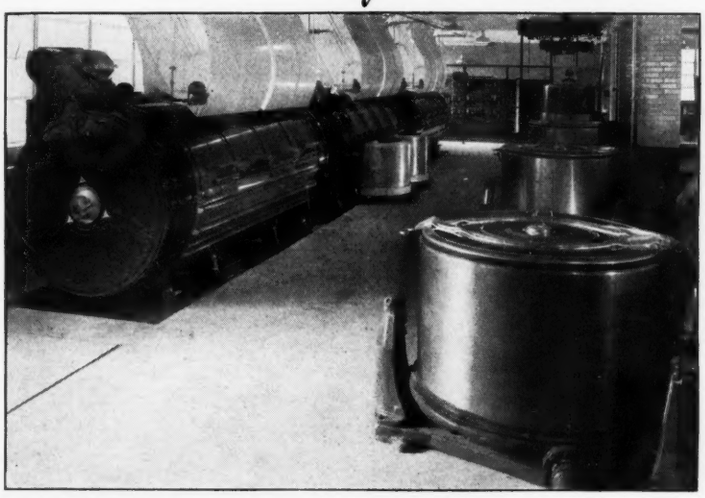
In the case of emergency lighting, instant response is vital, because it's the first sixty seconds that count. The utility companies take every possible precaution, but cannot control the effects of storms, floods, fires, or street accidents. An Exide System offers adequate and dependable protection for a single room or an entire building.

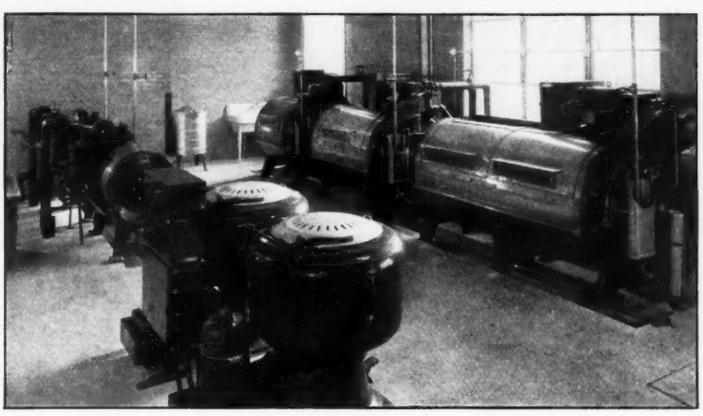
In addition to the large, 115-volt units, there is an Exide System especially designed for the needs of the smaller hospital. The only care Exide units require is the addition of water four times a year. Why not write for free bulletin?

Exide
Keepalite
EMERGENCY LIGHTING SYSTEMS

THE ELECTRIC STORAGE BATTERY COMPANY, Philadelphia
The World's Largest Manufacturers of Storage Batteries for Every Purpose
Exide Batteries of Canada, Limited, Toronto

Our Compliments to COOK COUNTY





The County Commissioners of Cook County, Illinois, are to be commended. Architect Eric E. Hall, of Chicago, likewise is deserving of congratulations. This is due them for their sound judgment in the selection of modern, high-production equipment for the laundry of Cook County Hospital, Chicago. They can, as a result, be justly proud of one of the outstanding institutional laundries in the world.

We are proud to have had the opportunity to cooperate in making this splendid laundry possible. We enjoyed the privilege of playing a part in its creation and are highly gratified at the successful results accomplished.

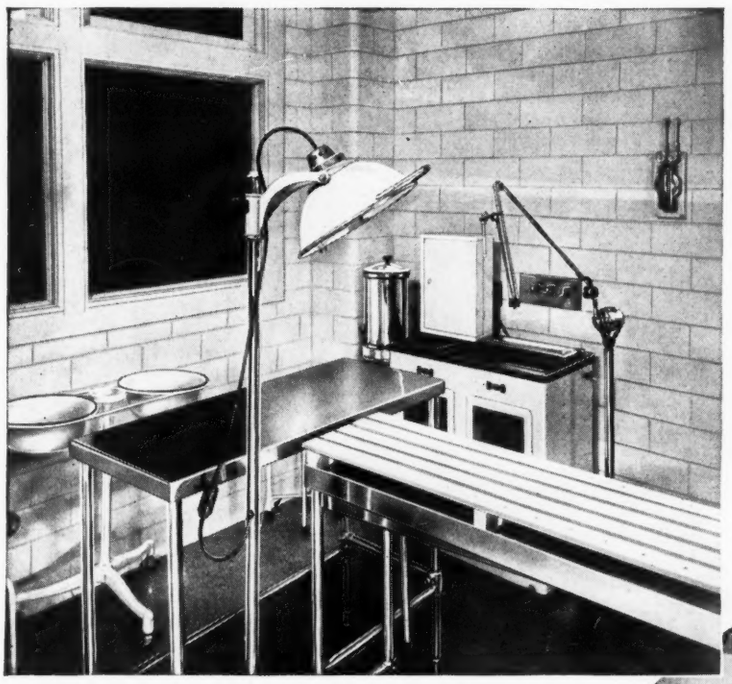
Two views at top show washroom in Cook County Hospital's modern, new laundry. Eight Monel metal CASCADE Washers produce highest quality washing with minimum water, supplies, steam, power and productive labor. Four high-production NOTRUX Extractors, top-right, rapidly remove surplus water for fast ironing or drying and, by eliminating man handling of work, drastically reduce labor costs and wear on linens.

Left:—Flat work ironing department, with three American 8-Roll STREAMLINE Flat Work Ironers that iron flat pieces beautifully at high speed. All are equipped with Ventilating Canopies to reduce heat radiation and increase operator comfort. TRUMATIC Folders attached to two of the ironers mechanically fold large pieces at lowest possible labor cost.

Right:—Continuous Conditioning and Shakeout Tumbler prepares flat work for fast ironing. Two ULTRA SPEED Tumblers dry work soft and fluffy that is not to be ironed. One of ZARMO Press Units for finishing shirts, uniforms, aprons and other apparel is shown in background at extreme left.

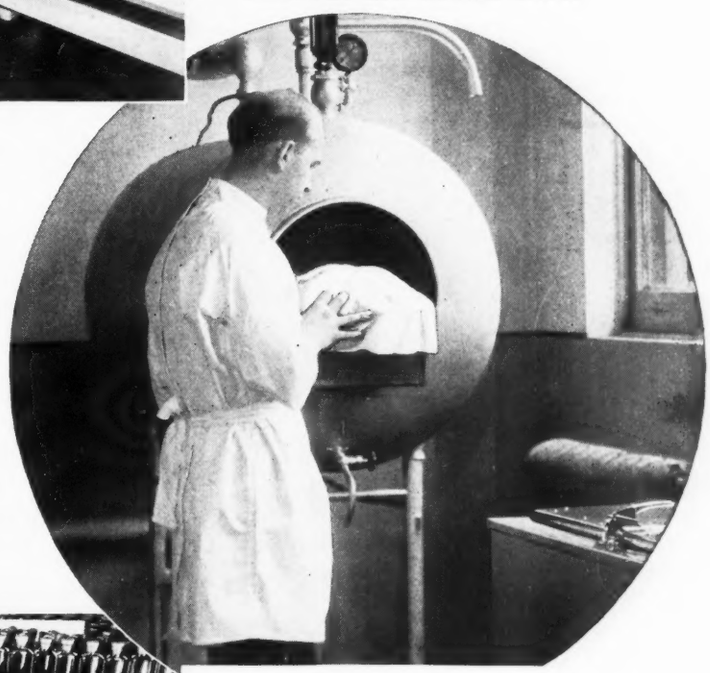
THE AMERICAN LAUNDRY MACHINERY CO., Cincinnati, O.

THE ARMOUR LABORATORIES TAKE NOTHING FOR GRANTED



● When you prescribe an Armour product, you take for granted its potency, standardization and dependability. You have every right to do so . . . because the Armour Laboratories take nothing for granted. They protect the dependability of every Armour preparation with long research, skilful techniques, strict, definite biological controls. Some typical Armour methods are shown here.

This is an Armour Operating Room. Here rats, rabbits and guinea pigs play the patient's role under modern surgical conditions. The discoveries made here have a major part in the development of new Armour preparations, and in finding new uses for the many Armour medicinals which you now prescribe.



Heat Sterilization . . . Another Armour Safeguard. All Armour solutions which heat does not damage are sterilized by heat. The attendant is removing a batch of ampoules from the autoclave. They have been flame-sealed by masked workers in aseptic rooms.

These Armour Biologicals are in Quarantine. They must remain in this room for 14 days, while samples of every lot are transferred to culture media and incubated to be certain of sterility. Further tests must prove their potency and standardization before they can be distributed to hospitals and to pharmacists.

THE ARMOUR LABORATORIES

Pioneers in Endocrinology since 1886

The Armour Laboratories M. H. 6-39
Armour and Company, Union Stock Yards, Chicago
Please send me booklets on the following Armour preparations: ☐ Solution Liver Extract ☐ Thyroid, ☐ Pituitary Liquid ☐ Suprarenalin Solution (Epinephrine)

*Dr.*_____

Address _____

*City*_____ *State*_____

The Crane Surbas Surgeon's Lavatory is made of durable, easily cleaned, vitreous china. It has a knee-action mixing valve with stirrup handle, and goose-neck spray spout. Equipped with quick-draining waste.

Crane Vitreous China Plaster Sink for handling plaster for casts—has porcelain enamel interceptor which prevents particles of plaster from clogging the waste lines. Clean-out provides easy access to brass screens.

ASSURING SAFETY
. . . in the Scrub-Up Room!

MANY a fight against contamination and infection is won today in the scrub-up room of modern hospitals. Here, Crane-Equipment offers positive assurance of safety—because Crane Wash-up Sinks and technical lavatories are designed to provide the greatest possible protection to patient, surgeon and nurse alike.

What makes Crane-Equipment first choice in so many modern hospitals today? It's the fact that Crane-Equipment is designed by technicians who are thoroughly familiar with hospital requirements . . . and who have devoted years of research and study to providing the best possible equipment for the purpose. There are special features that substantially reduce the danger of water-borne infection . . . Crane design which prevents dangerous back siphonage.

Whether you install wash-up sinks or lavatories and sinks for other hospital departments, you will find every Crane product is fitted to its purpose—perfectly. Use the Crane hospital catalog in making your hospital truly modern — and get complete information about the Crane Budget Plan of hospital modernization.

CRANE

CRANE CO., GENERAL OFFICES:
836 SOUTH MICHIGAN AVENUE, CHICAGO

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BEFORE I LEAVE, NURSE, TELL ME —WHAT MAKES THIS BED SO WONDERFULLY RESTFUL?

CERTAINLY . . . IT HAS A U. S. ROYAL FOAM SPONGE MATTRESS

"We Nurses Cheer for Foam Sponge mattresses, too. Only half the usual weight! So flexible they roll up small, like this—and fold back easily for bed-making. They're *sag-proof,* so we never have to turn them."

"See These Holes? They help cut down weight, increase softness. Foam Sponge itself is feather-light. It's mostly air—millions of tiny cells that all connect and make it self-airing, cooler in summer and warmer in winter."

BE "THE HOSPITAL WITH THOSE COMFORTABLE BEDS"

And enjoy the lower upkeep cost of **U. S. ROYAL FOAM SPONGE** *hospital mattresses*

Softer Than Flesh — Foam Sponge molds itself to every contour of the body—supporting completely, distributing weight evenly, resting perfectly. It "flows" down around curves that less flexible surfaces flatten tiringly—"flows" up to support curves that are usually "bridged." Even clothes, folds and bandages are absorbed by the mattress instead of irritating the body—eliminating the major cause of bed sores. Foam Sponge is naturally repellent to germs and vermin. Entirely porous, it is easily re-sterilized *through and through.* Covers slip off for laundering. The mattress itself is washable.

Sag Proof — moulded in one piece — with nothing to sag or pack down—Foam Sponge holds its shape and saves "rebuilding" expense year after year. *Entirely unlike ordinary "sponge" rubber*—it is odorless, practically inert to oxidation, doesn't get brittle —and its millions of air cells interconnect for hygienic self-ventilation. What is Foam Sponge? Pure milk of rubber trees (from our own plantations in Sumatra), whipped into Foam—then molded by the U. S. Rubber process that assures permanent shape. Its longer life will reduce your mattress replacements. Write us for further facts.

RUBBER WILL SERVE YOU BETTER

UNITED STATES RUBBER COMPANY • MISHAWAKA, INDIANA

NOW... the surface is more durable!

PROFIT FROM THE LONGER LIFE THIS PATTERSON HI-SPEED SCREEN ASSURES

YOU CAN now expect longer service from Patterson Hi-Speed Screens. For now they are made with the same extra-durable, semi-lustrous (Matte) surface which has proved so successful for the well-known Patterson Par-Speed Screens.

This new Matte surface is more scratch-resisting than the former glossy surface and is less affected by the damaging action of dust and grit. It is easier to clean and to keep clean.

And remember: you also get the same high speed, detail, contrast, and uniformity, as formerly.

Ask your dealer for a demonstration.

THE PATTERSON SCREEN CO., TOWANDA, PA., U.S.A.

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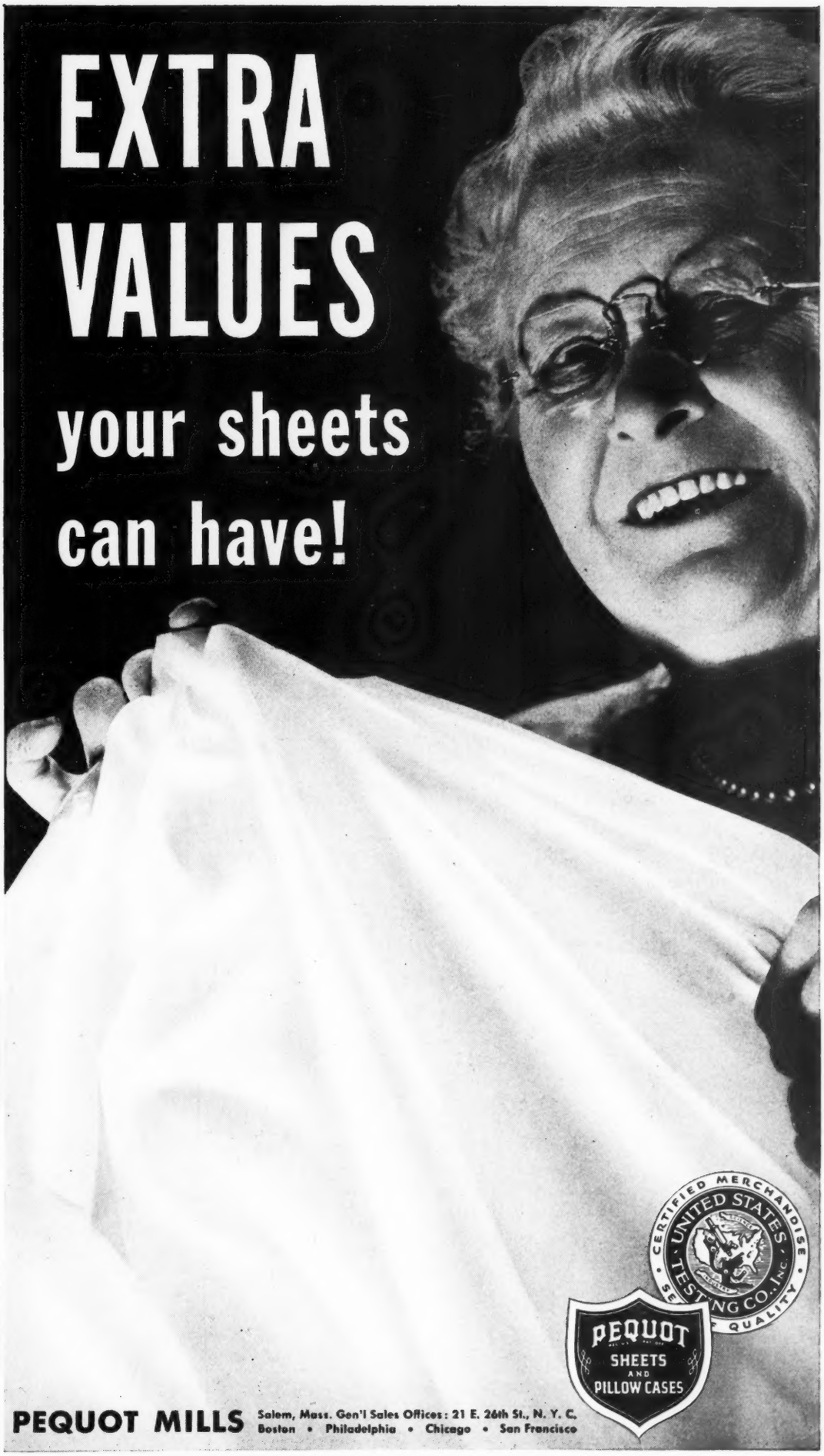
X-RAY

Screens

1914 — 25TH ANNIVERSARY — 1939

25 YEARS OF CONCENTRATION ON ONE TASK—THE DEVELOPMENT OF BETTER X-RAY SCREENS

5 EXTRA VALUES your sheets can have!



1

EXTRA WEAR

Longer service. Lower cost per sheet. You're sure of long-run economy when you buy Pequots!

2

EXTRA WELCOME

Every housewife knows and likes Pequots. They're smooth, soft, restful — America's most popular sheets.

3

EXTRA STRONG

The exclusive double tape selvage is just one example of Pequot's sturdy construction.

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EXTRA CERTAINTY

Every Pequot sheet is guaranteed in writing to exceed high U. S. Government standards.

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EXTRA CONVENIENT

The patented, permanent projecting size-tabs on Pequots save time in bedmaking.

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INSTITUTIONAL CASTERS

THE OUTSTANDING LINE OF QUALITY CASTERS

Adaptable for all types of hospital beds and equipment

BASSICK DIAMOND-ARROW Casters are outstanding because they provide the easiest "full floating" swiveling action—at the most economical prices.

The patented Bassick two-level ball race construction is the most efficient swiveling mechanism ever built in a quality caster.

These casters are available with types of stems and adapters to allow easy, correct and secure application to any type of equipment.

When you ask for Diamond-Arrow casters on equipment you buy, or for replacement purposes, you guarantee yourself the *best*.

Bassick casters are sold by conveniently located surgical supply houses and distributors.

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Canadian Factory STEWART-WARNER ALEMITE CORPORATION OF CANADA, LTD., BELLEVILLE, ONTARIO

APTLY DESCRIBED AS

"The Rubber Goods of Tomorrow"

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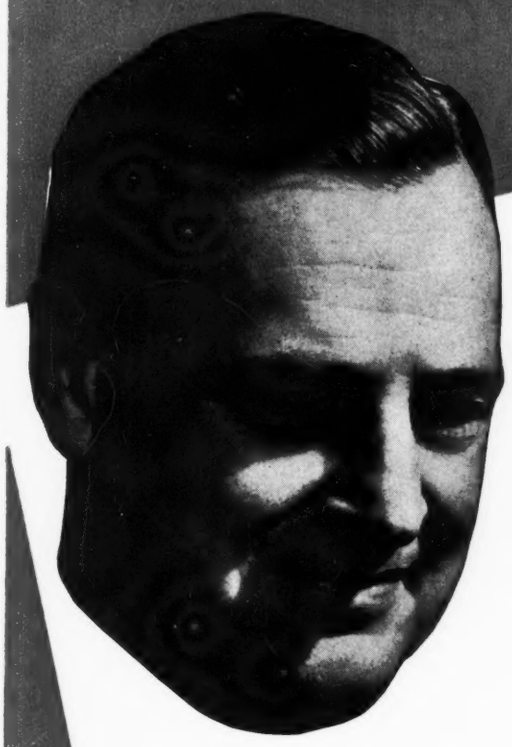
NEW ANODE LATEX SURGICAL TUBING brings hospitals Extra Safety Factor, Greater Convenience, Real Economy

Here's the kind of tubing you've always wished for—a radically new Latex tubing made by the patented Anode process. It's safer because of greater tensile strength, because there are no seams to split, and *no free sulphur*. Translucent, it also makes the liquid flow line visible at all times. Velvety smooth inside and out, it's easier to use, to cleanse and sterilize.

And how handy! It is easy to run off the desired length from an encased reel which holds *50 continuous feet.* It's in perfect condition, never soiled or kinked. And no more bother with miscellaneous sizes and short ends.

Best news of all is that this superior tubing actually reduces your costs. Only slightly more in price than other tubing, it more than pays the difference in longer life and service, in safety and convenience. Ask your surgical supply dealer to show you this latest Miller achievement in "the Rubber Goods of Tomorrow!"

MILLER RUBBER COMPANY, INC., AKRON, OHIO



Just what the Doctor Ordered!

Casserole Cookery for Convalescents

The recipe prepared in a Hall China Casserole is a hearty dish, hot and savory, steaming and bubbling in its own wholesome juices. It's just what the doctor ordered—nourishment at its health-building best!

Casserole cookery has other qualities that make it uniquely adaptable to the hospital bill-of-fare. The use of one dish from range to room prevents food shrinkage, saves fuel, reduces china inventory and breakage, and cuts dishwashing expense.

Hall China is perfect for casserole cookery. Its thick walls, designed for even distribution of heat, prevent scorching or partial cooking, and keep food oven-hot for protracted serving. Its glaze contains no lead; and it is the only known china that is crazeproof, fireproof, stain-proof, and absorption-proof because it is made by an exclusive, secret process.

THE HALL CHINA COMPANY, EAST LIVERPOOL, OHIO

HALL FIREPROOF CHINA

Made by an exclusive secret process

FOR COOKING · SERVING · STORAGE · ROOM EQUIPMENT